

# ARCHITECTURE

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## A Confidential Guide to the Contents

The frontispiece this month is another one in the series of original lithographs made for ARCHITECTURE by Gerald K. Geerlings, whose work as an etcher has been signally recognized in many quarters this year.

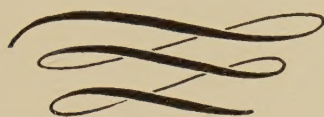
You may look through the architectural histories with some diligence, but you will find little mention of what Charles H. Whitaker calls "one of the finest pieces of site-planning I had ever seen." It comes down to us from the days when architects occasionally had kings for their clients. p. 260

It has been said of American architects of this and the last generation that they are the best copyists the world has ever seen. Nevertheless, although we have copied the appearance of English half-timber work, we have seldom found its soul. Here are some close-up studies of a manner of building which has left a distinguished record in the history of art. p. 267

In the issue for April it was originally planned to show a pictorial review of the Architectural League Exhibition. There were so many things of unusual interest in it that the review has overflowed into a second part, which is shown in these pages. p. 275

Notre Dame has been for ages the subject of those who sketch or paint. We had been under the impression that every possible aspect of the great pile had been drawn—until we saw this drawing by John N. Richards. Mr. Richards comes from Toledo. After spending several years in a local office there, he went to the University of Pennsylvania, and finally won the Stewardson Memorial Scholarship in Architecture, 1928-29. After his year of travel in Europe he returned to enter the office of Ritter & Shay, Philadelphia. p. 279

The newsreel of the architectural world—new undertakings shown in their tentative form; others recently completed and turned over to their owners. p. 280



Some new books, bulletins, and other like additions to the sum of architectural knowledge. p. 282

Homeland is one of the suburban residential districts outside of Baltimore. The whole community shows a very high plane of architectural merit, and the example herewith might have been chosen almost at random from many excellent houses of moderate size. p. 283

One might have expected Rockwell Kent to design for himself almost anything other than the very quiet, low-lying farmhouse type of summer home that he has built at Ausable Forks, N. Y. p. 285

Among the many things which the resident of Seattle takes pride in showing the visitor is the University of Washington. Slowly but surely it is growing into the splendid plan made for it by Bebb & Gould. One of the later buildings to be erected is the Henry Art Gallery. p. 289

Senator Newberry and his brother have built a church in Grosse Pointe, Mich., as a memorial to their parents. There is incorporated with it a complete equipment for the church of to-day in the way of parish house, organization rooms, and recreation hall. p. 291

In these days of branch banking, the small bank is springing up like mushrooms throughout our cities. An encouraging sign of the times is the almost universal high degree of architectural excellence found in these smaller banks, as well as in the large ones. p. 295

The very small house is unquestionably the hardest problem that ever faces an

architect. Here is one from the far Northwest into which the architect has succeeded in getting architectural personality. p. 297

In the distracting rush of what we call progress in art to-day, it may be of benefit to glance over our shoulder now and then at what has been done in the past, and see how our present work compares with it—in silverware, for example. p. 299

Mr. Yerbury has found this month, in his travels around Europe, a post-office, some shop fronts, a high school, a church, and a housing block, all in Germany, and a modern brewery in Norway. p. 301

Architectural gossip, news, criticism, personality, and comment—all from a frankly personal view-point. p. 309

There is so much of what is new in the pages of the architectural journals to-day, with an occasional glance far back into the past—that we are in danger of forgetting what we were doing in architecture a generation or two ago. A short glance backward might not be amiss. p. 311

Since we are no longer spending money and ingenuity of design upon great staircases, we are inclined to lavish attention upon entrance lobbies, letter-boxes, and particularly elevator doors, of which here is a miscellaneous collection. p. 312

Stucco as a building material in America grew too fast. Some of that growth was misdirected, so that the good name of the material has not always been maintained. Here is an organized effort to make sure that stucco will be stucco. p. 321

If you are not quite sure what a carillon is, and if, like most people, you believe that the making of church bells has degenerated from the good old days, read this informative article on page 322.

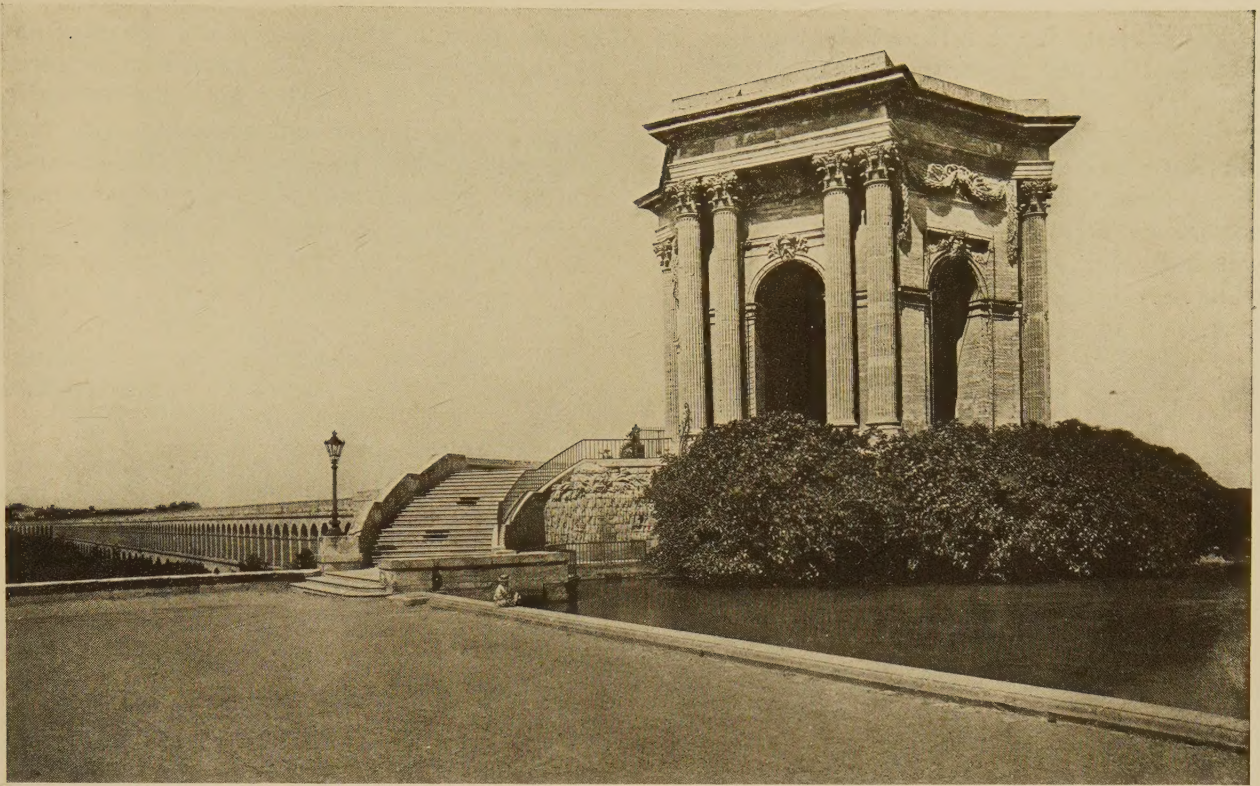




C. H. W.

*The Château d'Eau, Montpellier, one of the finest pieces of site-planning in the world—but the architect, Jean Antoine Giral, had a king for his client*





*The Château d'Eau and the aqueduct which brings the water from St. Clément to Montpellier*

## The Peyrou in Montpellier

*By Charles Harris Whitaker*

WHEN I said to my companion, a somewhat elderly and most charming antiquarian, that I thought the Peyrou in Montpellier, in which we were walking, was one of the finest pieces of site-planning I had ever seen, he answered: "Ah, yes, and so it is. But you see it takes a king to do such things." Whereupon I reminded him that the word *roi*, which he had used, had a singularly precise signification when changed into king, for in that form it came from the root word can. This offered a chance to comment on the fact that when men first began to choose their king they picked as their master man one who had shown that he could, and that when the line began to pass by inheritance the whole point of the great original idea got lost. My friend said nothing. I suspect that he is still Royalist at heart, and reads "L'Action Française" despite the Church's interdiction.

On the other hand, it took no great amount

of research to leave me somewhat doubtful about the real part played by kings in the building of the Peyrou. Precisely as I also discovered many things that quite demolished the very common belief that Daviler was its dominating designer. But, however small the part he played, the tale of Daviler's life is one to make modern methods of architectural education seem tame indeed—to make many a student and draftsman bite long and hard on pipe-stem or pencil, as he stares far and adventurously into those lands of fancy that the mass-production idea has removed almost beyond the reach of dreams.

You must not be skeptical, however, when Daviler's earliest biographer\* tells you that from his *première jeunesse* he made architecture his one study, for Bertram Goodhue certainly did the same thing. His progress was also quite as rapid as that of Daviler, who was sent to the Academy in Rome under the special protection

\* L'Abbe Hermant, "Histoire du Regne de Louis XIV."



of His Majesty Louis XIV. As he was born in Paris in 1653 and set out for Rome twenty-one years later, his progress can be calculated without difficulty. What part was played in his affairs by his father, who had been Procureur at the Châtelet in Paris, or by his friends, we do not know. What seems certain is that Colbert, who had founded the Academy of Architecture while serving as the famous treasurer of a great king, sent three young men to Rome in 1674. They were Vaillant, to study and collect medals; Desgodets and Daviler, to study architec-

superb mosque. You may doubt whether any biographer ever saw it. You know very well that none ever saw, in that day, a photograph of it, but whatever doubts and suspicions you may have are likely to dissolve when you discover that after eighteen months as a prisoner among bandits, Daviler started, when free, not for Paris but for Rome. He had set out to go to Rome, and there he went, and there he stayed for five years, "measuring," says one biographer, "all the ancient and modern buildings he could find." Then he went to Paris, where



C. H. W.

*A detail of the long promenade, lower level*

ture. They set out from Marseilles in what the historians describe as a felucca, but were soon taken by pirates and carried off to Tunis, whence Vaillant escaped after four months and where Daviler remained for a year and a half. I have no idea what became of Desgodets. It is recorded that the King took up Daviler's case with interest, which probably means that Colbert made some calculation of cost, for kidnapping in those days was strictly a business affair. Thus it appears that the King's interest, while referred to as cordial indeed, did not reach as far as his pocket, or that Colbert knew a thing or two about the kidnapping business. At any rate, Daviler was finally set free, not by means of a golden ransom, but because the French had, in the course of the trade, managed to carry off some of the bandit's kin. So they swapped their human booty without any more expense than the general overhead of the bandit industry.



It is at this point that you will become ready to believe our hero's meagre chroniclers, even when they tell you that, to beguile the tedious hours in Tunis, Daviler designed and built a



C. H. W.

*Where the aqueduct joins the Château d'Eau*

Mansard, alert for any one who could help him expand his mass-production idea, soon took him in tow. But Daviler had ideas of his own, it seems. It was not in his mood to sell his designing abilities to another who then not only used them but allowed them to become known as his own. It is even intimated that he saw no chance for himself in Paris, where the old men had all the commissions carefully sewed up long before the projects got into the public wind. Most of us will have no difficulty in accepting this version, and we might not even pause to inquire how it was that Daviler heard about the triumphal arch they were talking about in Montpellier. He had learned a good deal under Mansard, who needed no lessons in astuteness. Very likely he also had his ears open, as is the custom among those who get on.

However, the Peyrou was about to be launched. Kings, for generations, as far back as Jaime I of Majorca, in 1234, it is recorded by one chronicler, had looked beyond the walls of Montpellier at the rude rocky promontory that slumbered in the sun, and thought of it as a place where one might take the air, and be free of the dismal *ruelles*, *venelles*, and *culs de sacs* of the town. But it seems to have been the Mar-



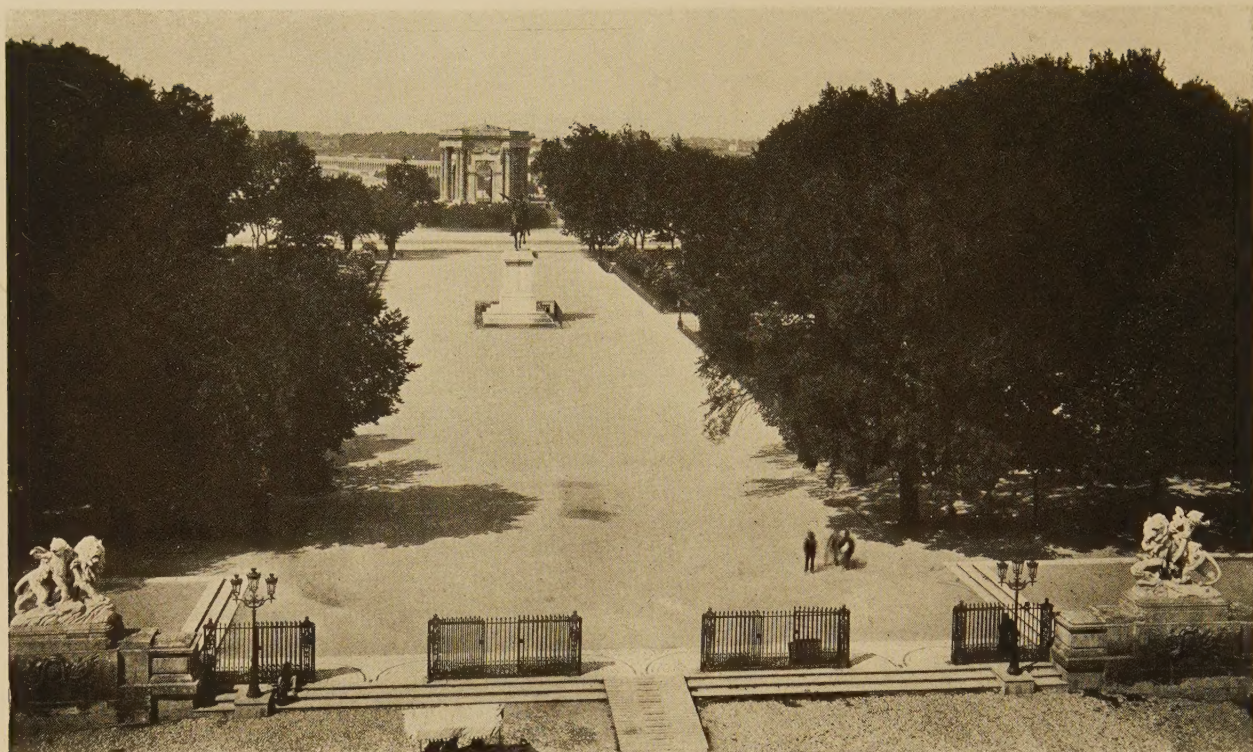


*The Triumphal Arch, designed by François Dorbay, through which one sees the later statue of Louis XIV and the Château d'Eau en axe*

quis de la Trousse, the Great Louis's Commandant in Languedoc, often mentioned in the letters of Madame de Sevigné, who, four centuries later, really set about planning how to get the promenade built. But he disappears. Enter his successor, the Comte de Broglio, with another plan, and enter the King's new Intendant

with still another. And then appears Dorbay, the designer, who seems to have made the plan for the triumphal arch through which the citizens of Montpellier were to pass to the Peyrou. The first rough park into which it was levelled has now given way to a spacious sweep where all is beauty and grace, and whence one may look





*A view from the top of the Triumphal Arch to the statue, the Château d'Eau and the aqueduct leading far beyond*

not only upon the historic Pyrenees and the lesser famed but still haunting Cevennes, but also on the romantic Mediterranean itself.

François Dorbay was the son-in-law of Louis Le Vau, the eminent practitioner in Paris, celebrated among many other things for his design of the Collège des Quatre Nations, now the Palais de l'Institut. They say that it was Dorbay who really erected the building, but in those days when the building industry was gradually changing the traditions of centuries under the influence of the general lump-sum contract, it is difficult to assign any principal parts. We know that designers protested so strongly against the malign influence of the general contractor that the lump-sum contract was for a long time forbidden by law. But of course its eventual triumph could not be avoided in a world where competition in price was gradually winning over quality.

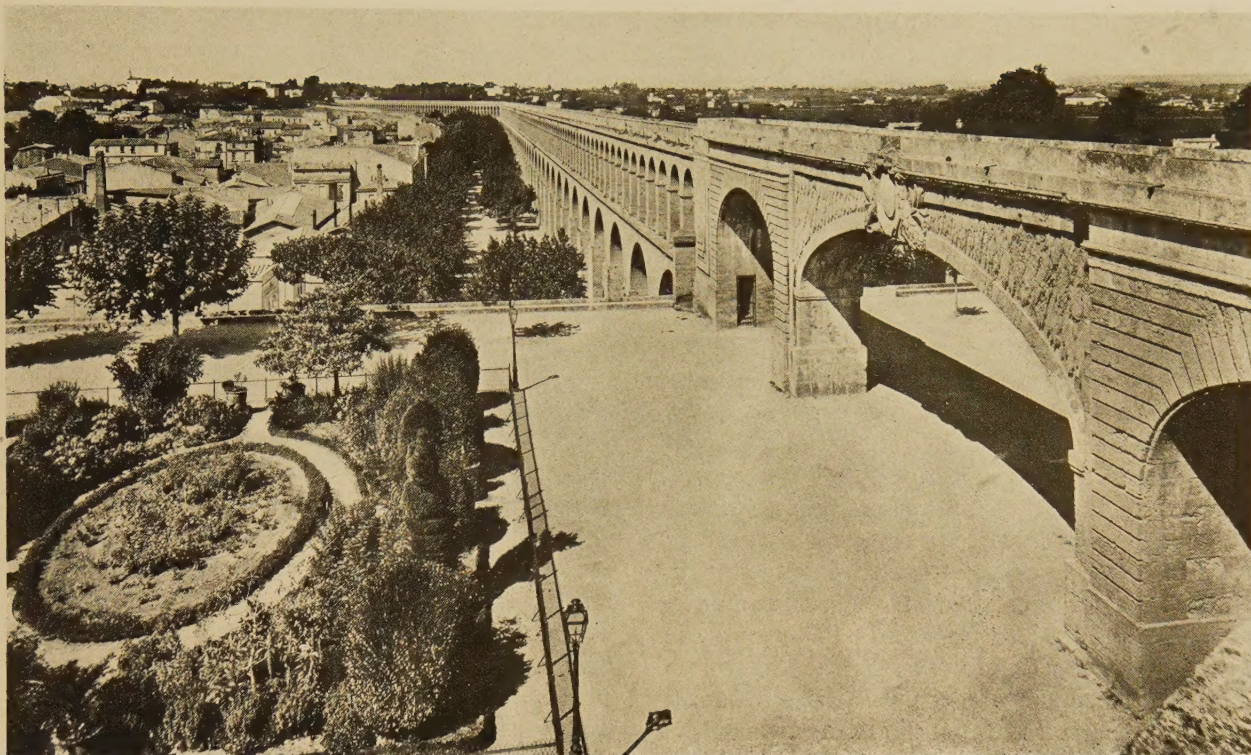
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Whether Daviler knew that Dorbay had already made a plan for the arch we do not know. That Dorbay made one is hardly open to doubt, and there is a rumor that his plan is in existence. I could not find it, but I did not exhaust all the possibilities. I was not very eager. The arch

speaks so eloquently for itself as to leave very little doubt that Dorbay borrowed the idea. Very likely Daviler further embroidered it, according to the custom by which design advances. The task of dethroning any architect, so far as credit for creative design is concerned, is so easy as to make it not worth while. Daviler seems to have been studious, persistent, and painstaking. It is recorded that he did much work at Montpellier, at Beziers, at Carcassonne, and that in 1699 he was commissioned to make plans for restoring the Pont du Garde. His famous "Cours d'Architecture"\* had been published when he was thirty-eight, and, as an altogether charming memory, it is duly recorded that "*on retrouve souvent, dans les édifices de cette époque, son style froid et sévère, mais remarquable par l'harmonie des lignes et des proportions.*" Many citizens of Montpellier still refer to him proudly as the architect of this building or that, with no more proof than words passed from lip to lip. But nevertheless, the Languedoc States General esteemed him highly, for they appointed him to be the architect of the province in 1693. He enjoyed the preferment but seven years, for he died at Montpellier in 1700.

\* There were successive editions in 1710, 1738, 1750, 1760, and a German translation by Sturm, published in 1693.





*Another view of the aqueduct as carried over the lower-level promenade*

It seems to be universally agreed that he built the triumphal arch of the Peyrou after the plans of Dorbay. In a day when the difference between the new profession of architect and engineer and the comparatively new trade of contractor was almost impossible to distinguish, I am content to let his record of having built the arch "after the plans of Darby," so far as the Peyrou is concerned, rest at that point. All of this was in the reign of Louis XIV. The Peyrou was levelled, 1689-1690. The triumphal arch was built, 1691-1693. The statue of Louis had been designed by Pierre Mazeline and Simon Hautrelle at about the same time, but as an interesting commentary on the business of sculpture (the statue was cast in the Mazeline foundry) one notes that it took twenty-five years to get the gallant equestrian erected in the Peyrou. What dickerings, and what bargains, what *dossiers*, *chiffres*, *projets*, and letters were written before the money was raised to see the thing through. Finally, however, the statue was erected and the Great Louis sat triumphant and glorious on his prancing charger. There were great parades, great dinners, great feasts, and great drinks.

Then, and very naturally, the Peyrou looked bare. One arch and one statue. A gorgeous panorama and a glorious site. There was a

scheme for a sort of *Allée*, adorned with statues of the great men of the day, which happily came to naught, and it was Montferrier who had the brilliant idea of bringing the water to Montpellier by way of the Peyrou. It wasn't a purely original idea. Men had been bringing water into cities for many a year. Maréchal was already doing the fountain at Nîmes. The King's engineers had already brought water to Versailles. Why not bring it from St. Clément to Montpellier? It was Henri Pitot,\* the engineer, a member of the Royal Academy of Sciences, who planned the aqueduct, and it was Jean Antoine Giral who designed the Château d'Eau and the exquisitely proportioned walls, stairways, and balustrades that stamp the Peyrou as a work which has no superior in harmonious composition. If you particularly admire the Château d'Eau, you will be interested to know that the Sieur Lapeyronie left a sum of money to build a lecture-hall in Montpellier. He stipulated that the building should be a reproduction of the amphitheatre of St. Côme at Paris. Giral was chosen for the task, and all seem to agree that he improved and perfected the design he was bidden to follow, which was an excellent experience and one well calculated later to influence the general scheme of the Château d'Eau.

\* Also recorded as Pitou and Pitout.



In passing, it is only fair to note that Giral's father, Etienne, had played with the project a bit, and that Donnat, a pupil of Jean Antoine Giral's, is mentioned with honor by all the chroniclers.



All of this, roughly, over a period of a hundred years, and then the political patience of a people came to that end which precipitates revolutions. The job having been disposed of, and the idea of democracy having risen over the land, there remained certain kingly vestiges to be cleared away. Thus, the first day of October, 1792, was set for the formal and official destruction of the statue of Grand Louis. It had taken twenty-five years for its erection. It had stood for seventy-odd years as a magnificent reminder of the royal idea. In one afternoon it was to be reduced to fragments. Three of the legs of the horse were sawn through. The fourth was left to keep the statue upright overnight. The municipality, the National Guard, and the populace came at four o'clock. Long ropes were attached to the great bronze. It was intended that all should have a chance in the posthumous dethronement. But old Louis resisted. The fourth leg would not let go. The event had to be deferred until the next day, when down it finally came, and the pieces were sent away to be cast into cannon. No doubt there were darkened Royalist rooms in Montpellier, where the faithful gave way to tears and sorrowful

mourning. Of revolutionary revenge there was surely a plenty, but the proposal to erect a new statue to Reason, Philosophy, and Virtue, by popular subscription, never got further than a few desultory centimes. It makes a difference, it seems, whether one gives or is taxed to pay, even in the matter of reason, philosophy, and virtue. Or, might it be that the place looked better with no statue? So I, at least, would prefer, but it was not to be, and a new one was projected. The corner-stone was laid in 1814. The sculptor was just being put to work when Napoleon came back from Elbe. Louis XVIII left hot foot for Belgium. Much talk and many sculptors demanding many prices from 1815 to 1830, and then another revolution. So the corner-stone stood lonely until 1849, when the present statue was erected. But even so, the kingly side of the Peyrou does not so greatly interest me. I see it as an expression of national genius working its way out through many minds, all the way from Jaime I of Majorca to the final touches by Giral. If you feel that it would have been far more useful to have spent these great sums on letting sunlight and air into those gray and forbidding alleyways of Montpellier, still among the most dismal in any French city, I would not gainsay you. I could only point out with truth, I think, that this particular kind of genius does

not work that way, either in France or elsewhere, to any great extent. As to the reasons why, that is something about which no one is, as yet, quite sure, least of all myself.



*From wherever viewed along the promenade, the Château d'Eau and its terrace walls,*

C. H. W.

*stairways, and balustrades present a composition of great beauty and dignity*





*Fig. 1. This Cotswold house at Weston-sub-Edge is a good example of simplicity in mass, along with commendable restraint in confining the half-timber to a limited portion*

## Suggestions from English Half-Timber Work

*By Kenneth Edmunds*

**I**N Europe the term "half-timber" has designated a type of building having timbers exposed to the weather, whereas in America the same words have seldom meant more than a pattern of veneered boards over a stud-and-plaster wall. It is little wonder that the term usually does not conjure up the charming European precedents, but implants instead an adverse prejudice arising from the excess of American imitations. Yet what else could be expected from insincere design which not only failed to analyze the spirit of the originals, but also ignored the tenets of sound construction? If, as a result, imitation half-timber has fallen into disrepute with present-day clients and architects, it is not surprising. In recent years, however, with the best architects using half-timber genuinely, and with an ever-increasing number of Americans annually going to Europe where the sterling merits of exposed timber cannot fail to be appreciated, there is good cause to hope for a new conception of this old material in American domestic architecture.

It is not unlikely that had America been discovered two centuries earlier, her most natural style of domestic architecture would be half-timber instead of Colonial Georgian. By the time that the Colonies were sufficiently pros-

perous to pay for state houses and Salem captains' homes, it was as a matter of course that the craftsmen-builders worked in accordance with their lifelong training. Steeped as they were in the Georgian tradition, their plans and elevations, construction and ornament showed a thorough knowledge sanely adapted to local problems. But unfortunately for half-timber, its inception over here was quite different. Instead of being the natural expression of craftsmen trained in the tradition of exposing constructional timbers, "half-timber" was erected by contractors who executed the orders of superficial designers.

The exterior design of a house was not related to the problem of construction. Rather it was handled as a wash rendering on a plaster surface, with vertical, horizontal, and geometric designs applied by means of  $\frac{7}{8}$ -inch boards. Naturally the results were deplorable. The half-timber boards were unsuited to exposure when merely applied; first they warped, and then they rotted. The *appliqué* designs were as restless as they were unrelated. Past usage of imitation half-timber by amateur designers and builders displayed such vulgarity of taste that in desperation one zealously desired membership in a Society for the Suppression of Half-Timber, with inquisitorial powers to burn it at sight.

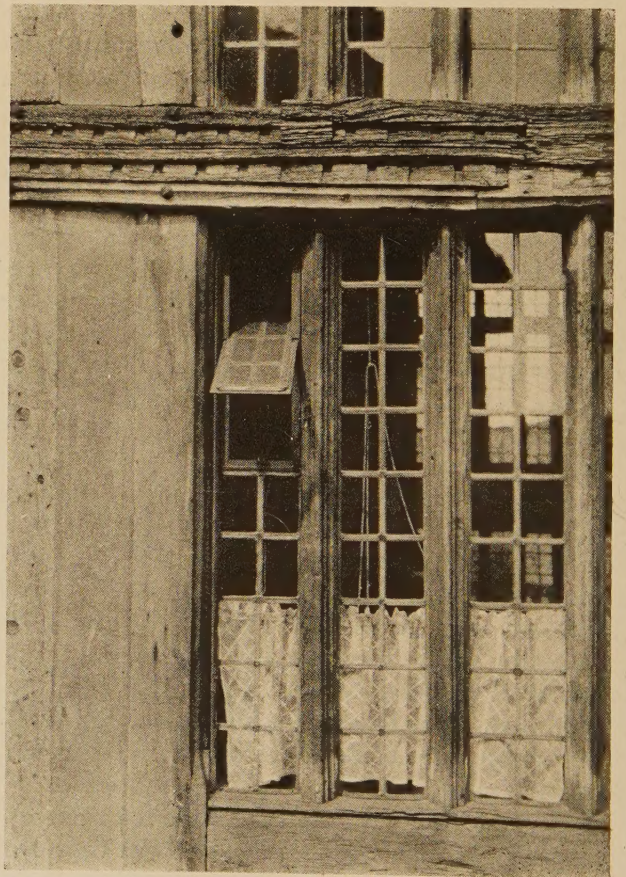




*Fig. 2. The Wool Hall at Lavenham, Suffolk, might well be considered the perfect precedent for the use of simple verticals, although its details may be prohibitive*



*Fig. 3. For the half-timbered house which can afford to be graceful and lively, these details supply several ideas*



*Fig. 4. This window, between the two projecting gables, runs through two ordinary stories with light, unusual sections*



*Fig. 5. Alongside the graveyard of the Cockfield church, Suffolk, this little half-timber and brick house is as sincere in design as its materials are beautiful*



*Fig. 6. This detail, to the left in the view above, shows good taste in changing the brick pattern at the floor level*



*Fig. 7. The brick are mostly dull red, with occasional brilliant ones; timber is weathered; roof is red where not mossy*



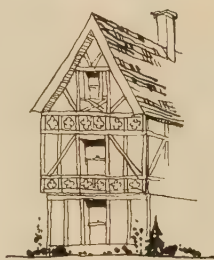


*Figs. 8 and 9. The brick of this Lavenham house varies from buff-pink to brown-red*



But to forget spurious half-timber, and to revisit England, fires one with equal enthusiasm to join a Society for the Promulgation of Genuine Half-Timber. Bearing in mind all the American client's aversions to paying for exterior oak, and all the varied curtailments of American practices, the old half-timbering seems self-evident proof that it is worth the price, and that it need not be an extravagance. There are countless English examples where half-timber is confined to a gable-end, or on an overhang between two gables, suggesting that its employment in even the modest house may not be costly. In fact, the house with half-timber used around its entire perimeter is not often as pleasing as where the timbering is confined to a certain portion only. Used overmuch, it loses its "precious" quality and becomes common.

A general characteristic of half-timber, which becomes impressive by its constant repetition in England, is that it is *always* constructional. It is never merely pretty-pretty. It was in



favor with the English wooded districts where timber was more easily obtainable than other building material, as any one can witness when coming down the Cotswold hills into the Evesham valley. And there is one inviolable dictum: half-timber shall not be used as applied decoration. It can be one of the most attractive focal points of a house, but only when of solid timbers.

Intelligent usage of half-timber will foresee that its employment should justify its existence. Otherwise it is rank extravagance. Bearing in mind that oak is expensive, it is a wise designer who achieves a thousand-dollar effect with two hundred dollars' worth of oak. For example (Fig. 10), the old inn at Waltham St. Lawrence can boast only a sparing amount of oak. On the front façade it is employed only at the corners, and in supporting the overhang. We happen to know, from



sleeping in the room at the centre which has no overhang, that the two adjoining rooms have gained enough in valuable area to more than pay for the oak. While it must be admitted that a few more struts would have made the brick panels above the overhang seem more secure, nevertheless the admirable effect accomplished by so few uprights seems noteworthy. (The gabled end has been altered, as it is needless to point out, and the oak, unfortunately, has been darkly stained.)

The greatest superficial difference between English and American half-timber design is that the former employs a majority of vertical members (forerunners of the American system of studs), whereas in America the criss-cross and jig-saw members are most in evidence. If one uses half-timber only in simple straight members, not only is the cost held to a minimum, but the best precedent is pursued. One may examine some of the best half-timber houses in England, and, except for occasional diagonal braces at the corners, the oak is confined to a few horizontals and many verticals. Some well-known half-timber towns, as Tewkesbury, rarely if ever employ any but horizontal and vertical members. If the many laymen who are attracted to Stratford-on-Avon observe this simplified English characteristic of half-timber, Shakespeare may well be given credit for exert-

ing a beneficial influence on American domestic architecture.

One of the most positive proofs of the non-constructural interpretation given half-timber in America is the commonly wrong direction of corner braces.

Were the designer given the problem of utilizing studs so that the weight transmitted by the roof to the wall be best distributed by the use of a corner brace, he would doubtless do so as in the marginal sketch A. Foreign half-timber always uses a diagonal strut at the corner in this direction. Yet because half-timber in America has largely meant mere surface decoration, the arrangement B, most common in America, transmits an unknown weight to the outer edge of an unsupported overhang.

One of the most vexatious problems in the employment of exposed oak is that of texture. The timber as it comes from the mill is either hairy with rough saw slivers, or absolutely smooth from a planer. On the other hand, to ask the average carpenter to adze the surface merely results in occasional chips being hacked out. It is quite analogous to how much "texture" should be given wrought iron. Examining ancient exposed oak is not enlightening, since several centuries of weathering have left the hard portions of the "annual rings" standing up in relief. It is not unlikely that the surfacing given exterior oak was not vastly different



*Fig. 10. The sixteenth-century inn at Waltham St. Lawrence combines half-timber with plaster above and brick below (left)*



*Fig. 11. The Guild Hall, Lavenham, has richly carved horizontal members, but the vertical timbers could readily be reproduced now*





Fig. 12. "This Hall was built in the fifth year of King Henry VII and restored in the eighteenth year of King George V"



Fig. 13. It is heartening to find restoration done with such fidelity that it has the beauty of the original work

from that given interior beams. If so, the adzing was carried to a point dependent upon the class of work—rough for a peasant's cottage, smooth for a lord's castle. It was a problem of making the rough log presentable and true, whereas now it is inversely a matter of making the machined timber appear not too meticulously even. For the fortunate architect with a fortune-favored client, an expert craftsman can adze a good average between the severely mill-planed and the *bourgeoisie* chipped surfacing. For an inexpensive performance of the task, however, it is difficult to explain to a job carpenter how the oak should be surfaced. Perhaps a solution is to have the oak delivered to the job saw-cut, and ask the carpenter not to *plane*, but to *adze* it smooth. The Liberty shop-window piers (Fig. 15) have an adzed surface which has been capably done, with perhaps a shade too much emphasis on the "antique" side; the varnished finish, however, scarcely seems as appropriate for the exterior as would a preservative and wax treatment. The restoration of the Old Hall, Chancery Lane (Figs. 12 and 13), has been thoughtfully and intelligently carried out, and it is regrettable that the photographs do not give an adequate conception of the surfacing.

Apropos of the actual texture of half-timber is the subject of dowels. In all old work one is conscious that these wooden pins are present to join two or more members. But they do not ostentatiously project in order to advertise

their presence. Modern imitations often project the dowels as though they were clothes pegs for the gardener's coat. If they are intended as a bona fide guarantee that the work is genuine half-timber, the overzeal is more apt to arouse one's suspicions than to elicit one's admiration. After observing old work with flush dowels, one regards those which project as ear-marks of a *nouveau-riche* character.

Plaster is used in conjunction with oak timbering probably more often than any other material, and its surfacing should be as thoughtfully considered as that of the wood. The Cotswold example illustrated (Fig. 16) is doubtless not the original plaster, yet it sets a sound precedent. The surface is flush with the timber, is fairly smoothly trowelled, and is a rough, sanded texture. Sometimes in America the plaster used with half-timber is energetically trowelled or coarsely surfaced, with the result restless and unpleasant. The timber creates a sufficiently bold design to be best complemented by an unobtrusive foil. Any exaggerated surfacing of the plaster divides the interest which the grain of the wood alone should possess, and thus defeats the chief reason for using half-timbering.

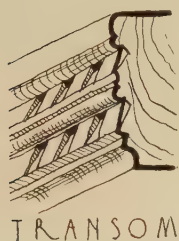
While brick is a more expensive material than plaster, used in conjunction with timber it always looks its money's worth. A common characteristic of all old half-timber and brick is their harmony of color, the brick carrying a variegated but warm tonality. The too common



type of modern brick, cold and uniform, and best described as imitation linoleum, would be disastrous to use. A distinctive employment in the Cockfield house (Fig. 6) is the herringbone pattern for the second floor, while the flat, wide brick faces are laid horizontally below. The Old Hall, Chancery Lane (Figs. 12 and 13), has an ingenious and varied series of patterns, consisting of tile laid flat with the usual size brick. If the brick run from soft yellow-reds to vermilions, with buff mortar, and the oak is decently adzed and dowelled, it will be difficult not to arrive at a delightful effect—at least so it seems in the company of old work.

For the wealthy client who desires something more ornate than the simple, adzed timbering, the Lavenham illustrations are full of suggestion. Instead of concentrating interest on a

carved and pierced vergeboard, which might easily cost such an enormous sum that no detail nearer the eye can receive any attention, the window and horizontal-member refinements of the Wool Hall (Figs. 3 and 4) are highly to be recommended. The cross-section profiles (shown below) could readily be run at the mill, and the simple checkered relief cut on the job with a chisel, relying upon the eye rather than the calipers for spacing. The next suggestions up the enrichment scale, also near enough the eye to be appreciated, are the brackets and little column caps of Figure 3. Alternatives for the latter are the carved running bands of Figure 9. These are very simply designed, and are executed so as to preserve their wood identity. The little figures at the doorway, with their retinue of crockets, bands, bases, and finials, be-



TRANSOM

Fig. 15. This adzed mullion at Liberty's is excellent except for the varnish



Fig. 14. The gables of two houses at Tewkesbury, showing the contrast of naturally weathered timber, and the ugly painted variety



Fig. 16. Timbers of this Stanton barn vary between 7 and 8 inches







*Fig. 17. One of the oldest and most ambitious of Tewkesbury houses*

*Fig. 18. Fish street, Shrewsbury. White-painted brick in half-timber at left*

(Photograph by Harry Leslie Walker)



*Fig. 19. Another Tewkesbury house, with a fondness for projecting floors*

long to a bygone age, and would no doubt appear more appropriate to a stage-set than a house, if reincarnated to-day. In the past there have been so many poor examples of pseudo-carved and Victorian ginger-breaded verge-boards that one hopes, if the client delights in ornament and refinements, these various other units will be enriched first.

Two other considerations, in addition to those of constructive forms, texture, plaster, and brick, are scale and color. As for scale of the vertical timbers, seldom are the old ones less than seven inches in width. Making them less than six inches is too dangerous to attempt. If only a certain sum can be spent on timbering, far better to confine it to a small portion and gain the desired effect, than to spread it too thin and throw away every possible chance of success.

As to color, the layman may think of half-timber as being habitually black, because of American imitations, advertisements, posters, and tourist coffee-rooms, where this is true. We have ferreted out no documents to prove that in its heyday the oak was not painted or stained black, but we cannot force ourselves to believe this was the practice of craftsmen who understood wood thoroughly, used it as such, and appreciated it for its color and grain. To

support this belief there is the lack of any remnant of dark paint or stain on deep carving of neglected examples—ones which have obviously not undergone careful scraping in "restoration." Houses like those in Figures 2, 5, and 8 have beautifully weathered oak, which may have had a wood preservative applied (if this was known), but show no traces of paint. The Guild Hall at Lavenham (Fig. 11), on the contrary, has been so painted that all modelling *finesse* of the carving is irretrievably buried. The upper and unaltered portions of the gabled houses in Tewkesbury (Fig. 14) illustrate naturally weathered oak at the left and painted timber at the right. Obviously, their æsthetic merits cannot be compared. Where one employs oak as an integral part of the wall, the other accentuates it falsely, so that it divides the wall into an irregular, garish, and restless pattern. Rather than wait until oak weathers to a beautiful nut-brown, it is perfectly good practice to use some preservative, such as creosote, which will act as a light stain. Before the house passes from the architect's responsibility into the owner's hands, the latter should be educated up to the point where he will appreciate that painting oak is the culmination of bad taste, and amounts to losing the effect he has paid to secure.





*Administration Building, Wells College, Aurora, N. Y.  
Dwight James Baum, Architect*

## *A Pictorial Review of the Architectural League Exhibition*

FEBRUARY 1 TO MARCH 2, 1930, IN THE FINE ARTS BUILDING, NEW YORK

Part II. (The first part was shown in the April issue)

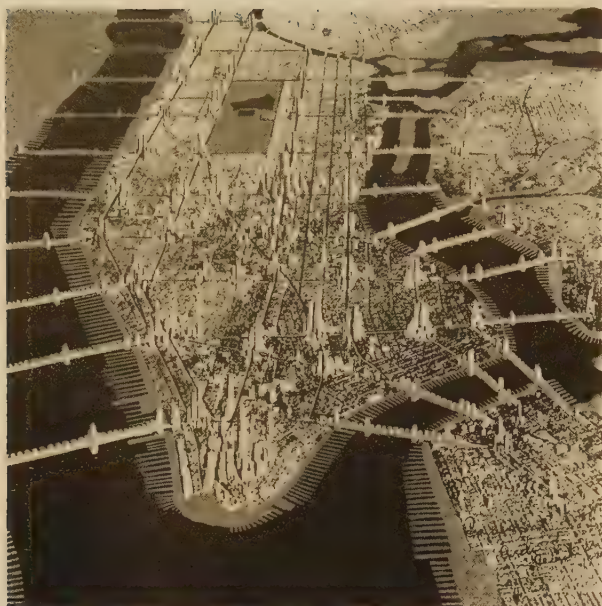


*Brooklyn Law School of St. Lawrence University,  
Brooklyn. Mayers, Murray & Phillip, Architects*



*Nightingale School, East 92d Street, New York City.  
Delano & Aldrich, Architects*





*Bird's-eye view of Manhattan and its ranges of skyscrapers over transportation lines, with mountain peaks of industry over each entrance. Bridges are designed for apartment-dwelling. Suggested by Raymond Hood, Architect*



*Airplane view of a business centre built over subway and railroad. Note cross-over for traffic at intersecting streets, and bridges connecting the four buildings. Suggested by Raymond Hood, Architect*

*Stained-glass medallion, "Old King Cole." Designed and executed by Margaret Redmond*



*Building for the R. J. Reynolds Tobacco Company, Winston-Salem, N. C.*

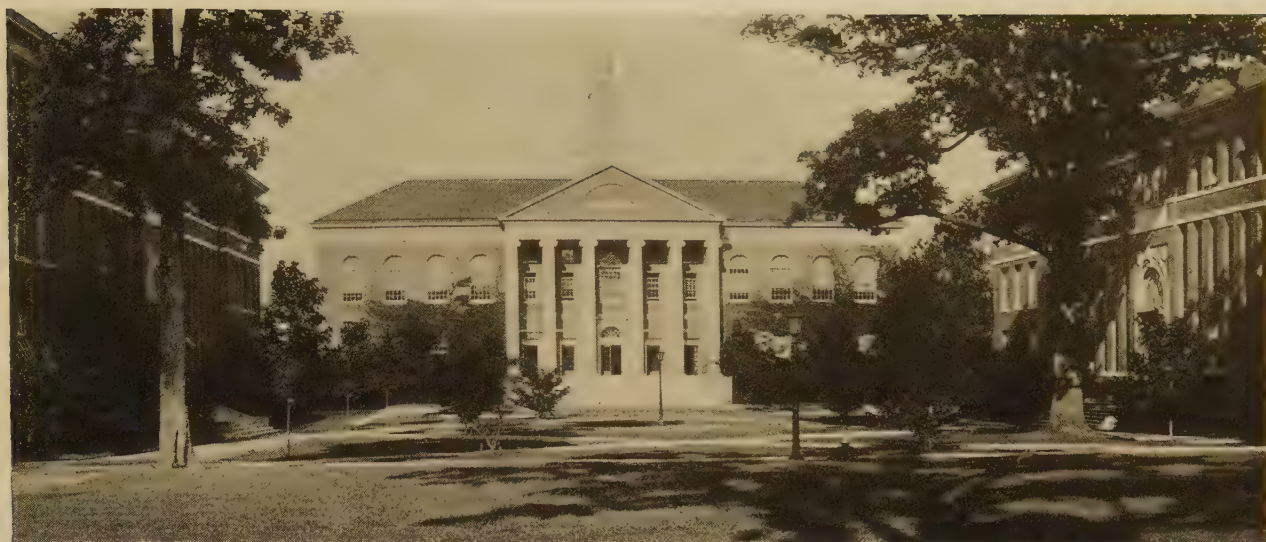


*Idealized head in alabaster. Joseph Kiselewski, Sculptor. American Academy in Rome*



*Shreve & Lamb, Architects*





*Manning Hall,  
University of North  
Carolina*

*Atwood & Nash,  
Inc., Architects;  
McKim, Mead &  
White, Consulting  
Architects*



*Telephone Build-  
ing, Great Neck,  
Long Island*

*Voorhees, Gmelin  
& Walker, Archi-  
tects*

*Farmers Trust  
Company of Lan-  
caster, Pa., and a  
detail of entrance*

*Melvern R. Evans,  
Associate Architect*





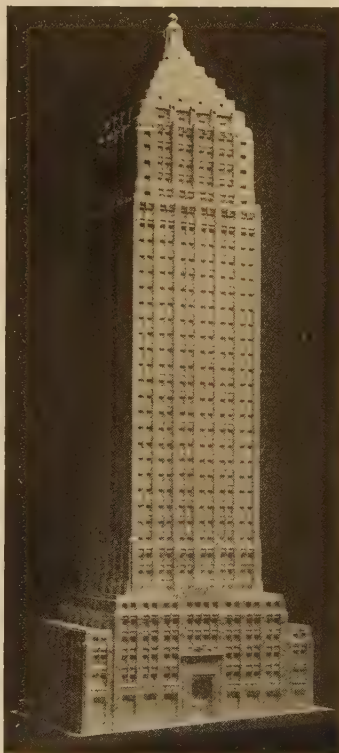


*Chancel, St. Bartholomew's Church,  
New York City. Mayers, Murray &  
Phillip, Architects of later work;  
Hildreth Meière, Painter*



*Detail, house of Louis Wilputte,  
New Rochelle, N. Y. Julius Gregory,  
Architect. Mr. Gregory received  
Honorable Mention for his resi-  
dential work*

*Hartford County Building, Hart-  
ford, Conn. Paul P. Cret and Smith  
& Bassette, Architects*



*Scale model of the Gulf Build-  
ing, Pittsburgh, Pa. Trowbridge  
& Livingston, Architects; E.  
P. Mellon, Associate*

*Perspective drawing of New School  
for Social Research, New York City.  
Joseph Urban, Architect*







NOTRE DAME, PARIS  
*From the drawing by John N. Richards*  
*(Stewardson Memorial Scholarship, 1928-29)*





*The proposed Steuben Club for 58th Street and Lexington Avenue, New York City. Clinton & Russell, architects*

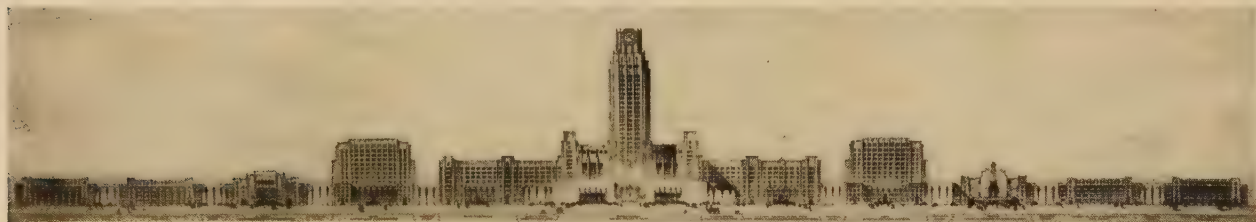


*The proposed Continental Building, New York City. The Firm of Ely Jacques Kahn, architects*



*The proposed Victor Building with St. Bartholomew's in the foreground, New York. Cross & Cross, architects*

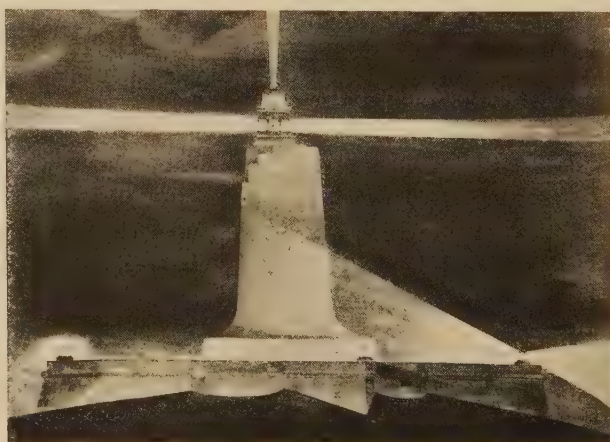
## Architectural News in Photographs



*The proposed Terminal Buildings for Los Angeles, to provide a unified scheme for underground railway service connecting warehouses, factories, and passenger-stations. John Mead Howells, architect for design and consultation; John and Donald B. Parkinson, architects for construction and supervision*



*"The Early Settlers of New England," recently unveiled in Worcester, Mass. Maurice Sterne, sculptor, who won the competition*



*Winning design for Wright Airplane Memorial at Kitty Hawk, N. C. Robert P. Rodgers and Alfred E. Poor, architects*





*Proposed State Capitol of Louisiana at Baton Rouge. Weiss, Dreyfous & Seiferth, Inc., architects*



*The American Building in Venice designed by Delano & Aldrich, architects, to house our art display at the Biennial International Exposition*



*Rochester's tallest building, the Eastman Kodak office tower, is to have three new stories and a pyramidal roof added. Gordon & Kaelber, architects*

*Cherry-blossom time on the Potomac—just a few weeks too soon to be enjoyed by the convention of the A. I. A.*

*By Ewing Galloway*

*The Administration Building for the Chicago World's Fair. Holabird & Root, architects; drawing by Hugh Ferriss*





## BOOK REVIEWS

### FRENCH GOTHIC SCULPTURE. Two volumes.

By MARCEL AUBERT and PAUL VITRY. 217 pages, 9 by 12 inches, and 178 plates. New York: 1929: Harcourt, Brace & Company. \$63.

A sumptuous and comprehensive gathering of photographs reproduced at large scale in collotype. There are other books on French sculpture of the twelfth and thirteenth centuries, but in these two volumes the aim has been to present a selection of the most expressive monuments. The difficult matter of choice has been in the hands of Paul Vitry, curator of sculpture at The Louvre. The first volume covers early French Gothic sculpture from 1150 to 1225. Volume II treats of Gothic sculpture during the reign of Saint Louis—1226 to 1270.

### LES CHÂTEAUX DE NORMANDIE. Two volumes.

By HENRY SOULANGE-BODIN. 234 pages, 10 by 13 inches, and 156 plates. Illustrations from photographs. Paper binding. Paris and Brussels: 1928-1929: Les Editions G. Van Oest. \$20.

The French are apparently coming to an even greater realization in recent times of their architectural treasures. These two volumes bring together in a beautiful series of collotype plates one single branch of these treasures—but a branch that has frequently been overlooked in the dazzling greatness of the châteaux south of Paris. The illustrations include much of the detail of interior decoration, some of the mural painting, and the landscaping.

EGYPT. Architecture, Landscape, Life of the People. By LUDWIG BORCHARDT and HERBERT RICKE. 272 pages, 9¼ by 12 inches. Illustrations from photographs. Printed in Germany. New York: 1930: B. Westermann Company, Inc. \$7.50.

A pictorial survey of architecture, landscape and people. The photographs are excellent, the reproductions clear and of large size.

THE AMERICAN SOCIETY OF HEATING AND VENTILATING ENGINEERS GUIDE. Vol. VIII. 941 pages, 6 by 9 inches. Illustrations from diagrams. New York: 1930: American Society of Heating and Ventilating Engineers. \$5.

A handbook of technical data, details of the codes, and roll of membership. There is a particularly comprehensive index to subjects.

THE PAINTER'S CRAFT. By ROYAL CORTISOZ. 473 pages, 5¼ by 8¼ inches. Illustrations from paintings and photographs. New York: 1930: Charles Scribner's Sons. \$3.50.

Mr. Cortisoz has given us a new volume of essays on painting and the related arts of sculpture

and architecture. In the chapter, "A Group of American Architects," he tells of the early days of McKim, Mead & White, their close personal relations with the sculptors and painters, and their epoch-making work in the architecture of America.

EXPERIMENTAL BUILDING SCIENCE. Vol. II. By J. LEASK MANSON and FRANCIS E. DRURY. 468 pages, 5½ by 8½ inches. Illustrations from diagrams and graphs. Printed in Great Britain. New York: 1929: The Macmillan Company. \$7.50.

An introduction to mechanics and its application to the design and erection of buildings. A book for the student, issued in The Cambridge Technical Series.

THE LIFE AND TIMES OF CHARLES FOLLEN McKIM. By CHARLES MOORE. 356 pages, 6¼ by 9¼ inches. Illustrations from photographs and drawings. New York: 1929: Houghton Mifflin Company. \$6.

The author, who has long been chairman of the National Commission of Fine Arts, is eminently qualified to write the authoritative biography of this outstanding figure among American architects. Among the many interesting features of the book is a chronology in the appendix giving many significant dates, and also an office roll of McKim, Mead & White, showing the many architects who have passed through this great training-school. There is also a complete list of the works of the firm.

NIEUW-NEDERLANDSCHE BOUWKUNST. By PROF. IR. J. G. WATTJES. 340 pages, 9¼ by 12 inches. Illustrations from photographs and plans. Holland: 1929: N. V. Uitgevers-Maatschappij "Kosmos," Amsterdam. Fl. 17.50.

Another pictorial survey of modern architecture in Holland with an introduction in English, German, and French. The traditional technic of the Dutch builder in brick is everywhere apparent, although in some of the modernistic efforts it seems rather less *en rapport* than in the good old work.

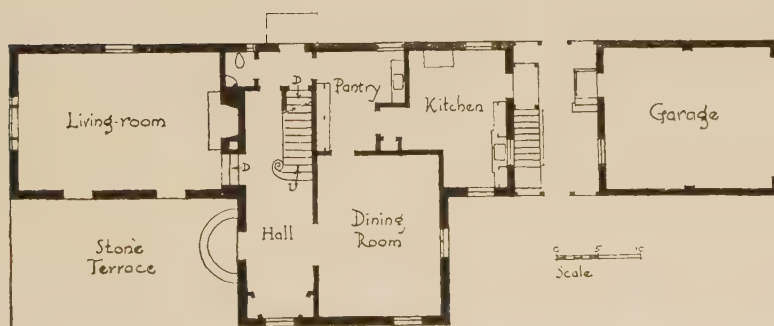
FORM AND RE-FORM. A Practical Handbook of Modern Interiors. By PAUL T. FRANKL. 203 pages, 5¾ by 8½ inches. Illustrations from photographs. New York: 1930: Harper & Brothers. \$5.

A presentation of Mr. Frankl's theories and review of modernistic interior decoration. Incidentally, in format the volume presents an amusing effort to be modernistic in book-making, an effort which results chiefly in making the text hard to read and the subject-matter of the illustrations difficult to appraise.





H. H. S.



HOUSE OF  
CHARLES H.  
ROLOSON, JR.,  
HOMELAND,  
BALTIMORE,  
MD.

ADDISON F.  
WORTHINGTON  
AND CYRIL H.  
HEBRANK,  
ASSOCIATED  
ARCHITECTS



*Leopold*

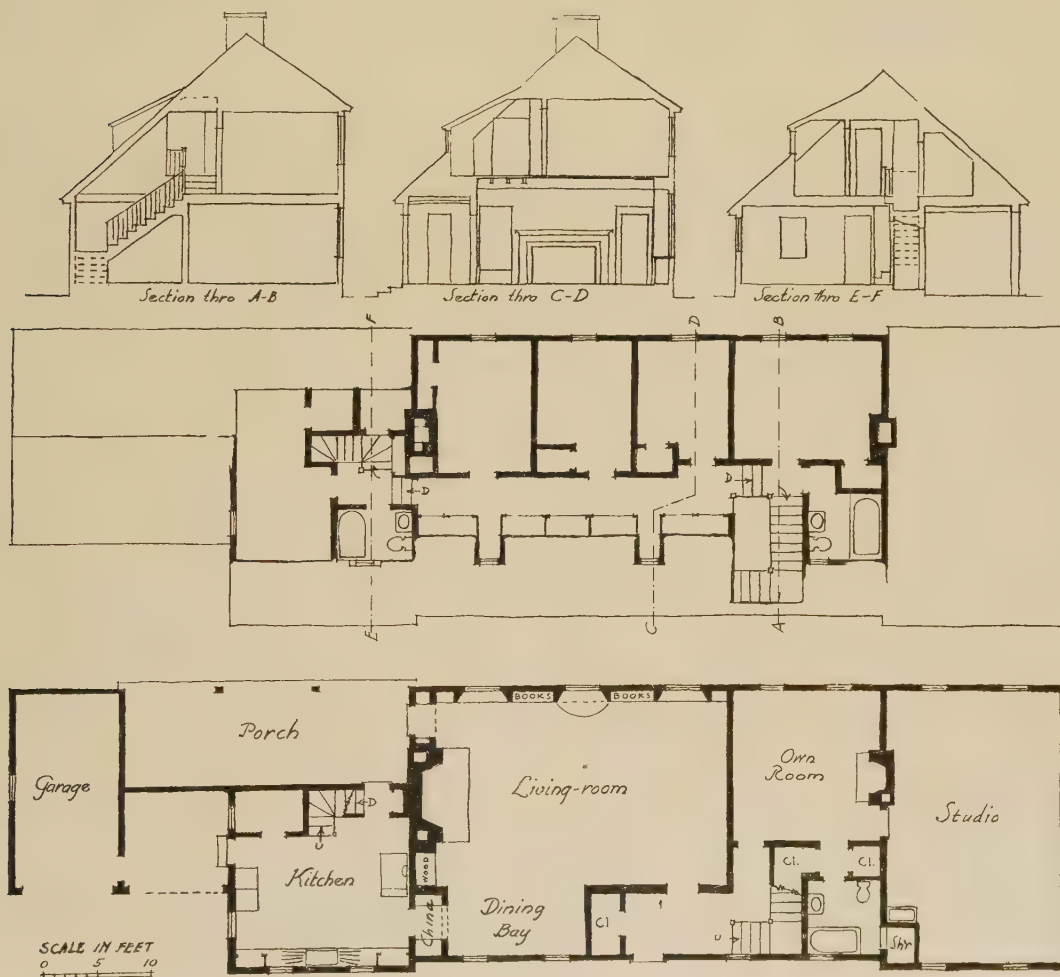
HOUSE OF CHARLES H. ROLOSON, JR., HOMELAND, BALTIMORE, MD.  
ADDISON F. WORTHINGTON AND CYRIL H. HEBRANK, ASSOCIATED ARCHITECTS





HOUSE OF ROCKWELL KENT, AUSABLE FORKS, N. Y.

DESIGNED BY ROCKWELL KENT







HOUSE OF ROCKWELL KENT, AUSABLE FORKS, N. Y. DESIGNED BY ROCKWELL KENT





*The living-room. Mr. Kent has covered the walls with United States geological survey maps reminiscent of country explored in numerous tramps*

HOUSE OF ROCKWELL KENT, AUSABLE FORKS, N. Y.  
DESIGNED BY ROCKWELL KENT





*The central  
window in the  
living-room*

*The dining  
bay as seen  
through the  
arched way to  
the kitchen*



HOUSE OF  
ROCKWELL.  
KENT,  
AUSABLE  
FORKS, N. Y.

DESIGNED  
BY  
ROCKWELL  
KENT





*Photographs by Depue, Morgan & Co., Inc.*

*In the general plan of the University, shown on the next page, the group at the lower end of the main axis has been revised. The new plan provides for a central rotunda and tower, an auditorium in the rear of this, and two museum wings on either side reaching to the front and enclosing a court in which will stand Lorado Taft's Washington. The Henry Art Gallery forms the front element of the left wing. This plan also provides for a boulevard approaching on the central axis from the west*

HENRY ART GALLERY OF THE UNIVERSITY OF WASHINGTON, SEATTLE, WASHINGTON  
BEBB & GOULD, ARCHITECTS





HENRY ART  
GALLERY OF THE  
UNIVERSITY OF  
WASHINGTON,  
SEATTLE,  
WASHINGTON

The  
entrance  
lobby

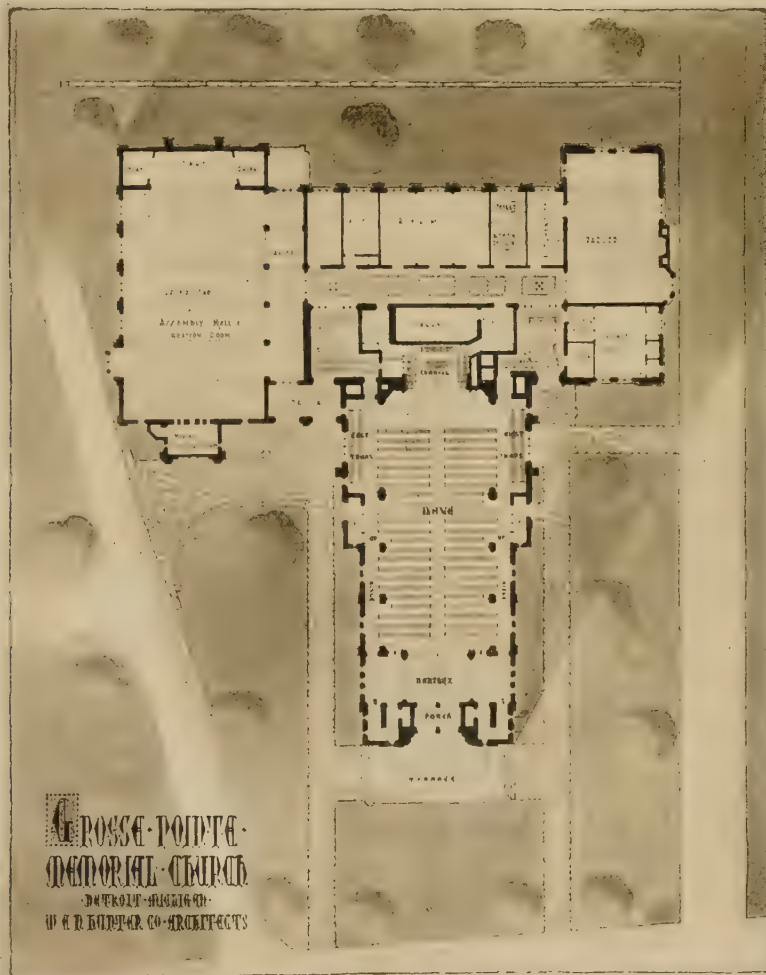
BEBB & GOULD,  
ARCHITECTS





GROSSE POINTE MEMORIAL CHURCH, DETROIT, MICH.

W. E. N. HUNTER CO., ARCHITECTS



*The church, seating about six hundred, was erected by Senator Newberry and his*

*brother as a memorial to their parents. The cost was approximately \$600,000*





GROSSE POINTE MEMORIAL CHURCH, DETROIT, MICH.  
W. E. N. HUNTER CO., ARCHITECTS





GROSSE POINTE MEMORIAL CHURCH, DETROIT, MICH.  
W. E. N. HUNTER CO., ARCHITECTS



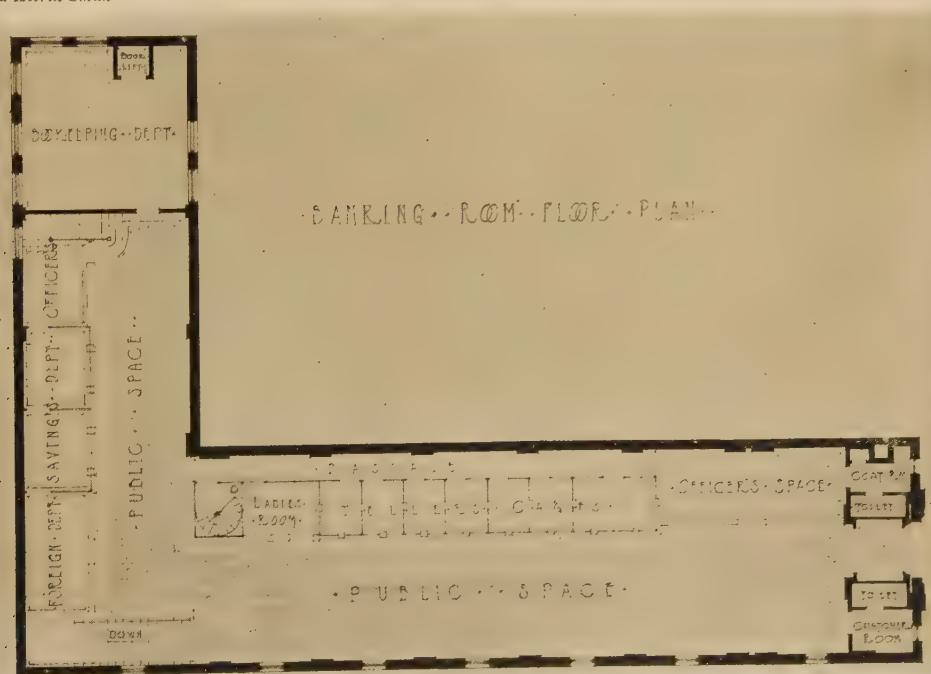


GROSSE POINTE MEMORIAL CHURCH, DETROIT, MICH.  
W. E. N. HUNTER CO., ARCHITECTS





Photographs by Richard Aserill Smith



UNITED STATES TRUST COMPANY OF NEWARK, NEWARK, N. J.

WILLIAM E. LEHMAN, ARCHITECT





*The banking-room  
as seen from near  
the front entrance  
on Broad Street*



*At left, the banking-  
room from the rear,  
looking toward  
main entrance. The  
safe-deposit space  
is in the basement*

UNITED STATES  
TRUST COMPANY  
OF NEWARK,  
NEWARK, N. J.

WILLIAM E.  
LEHMAN,  
ARCHITECT





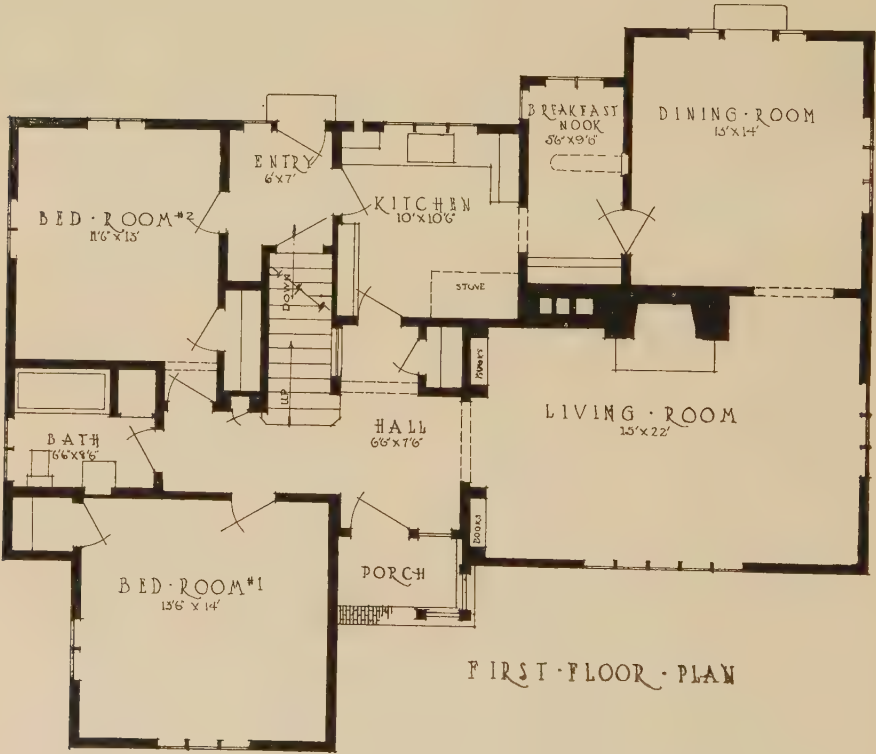
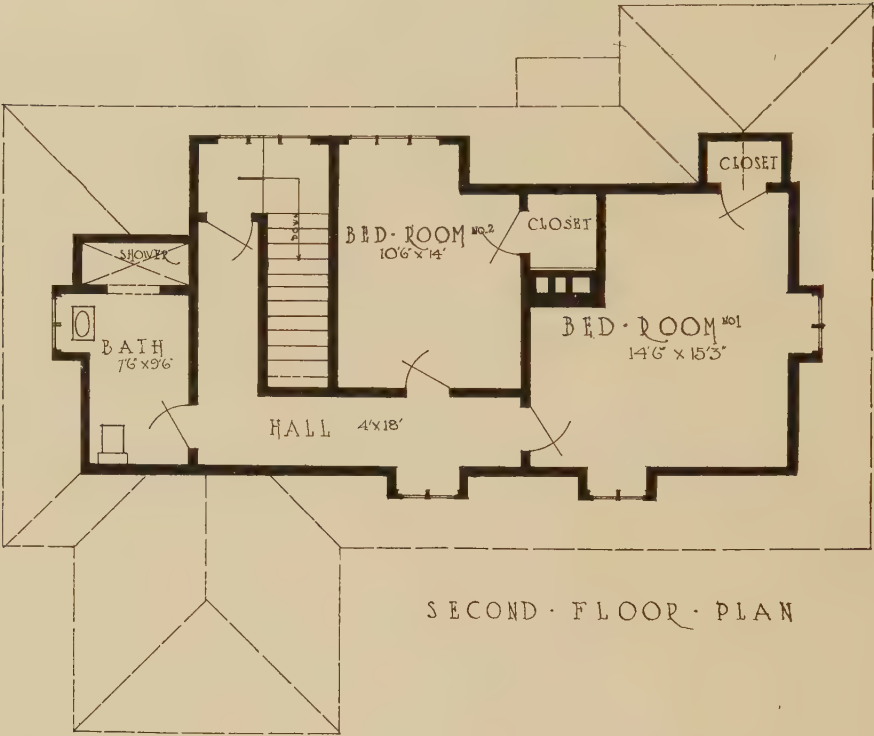
*The floor plans are shown on back of this sheet*



HOUSE OF ROBERT E. ROGERS, PORTLAND, OREGON  
HAROLD W. DOTY, ARCHITECT







HOUSE OF ROBERT E. ROGERS, PORTLAND, OREGON  
HAROLD W. DOTY, ARCHITECT



# Yesterday and To-day

A GLANCE AT SOME  
OF THE MINOR ARTS  
—OUR PRESENT-  
DAY EFFORTS COM-  
PARED WITH SOME



OF THE RECOG-  
NIZED ACHIEVE-  
MENTS OF PAST  
ERAS—THIS MONTH  
IT IS SILVERWARE

*At right and below, the  
three pieces of a tea ser-  
vice of nineteenth-cen-  
tury English make, from*

*the Lazarus Collection.  
Photographs by cour-  
tesy of the Metropolitan  
Museum of Art, New  
York City*



*A tea service of to-day, designed and executed by Black, Starr & Frost—Gorham*





*American beaker, 1719, made  
by Moody Russell, Barnstable,  
Mass.*



*American teapot, late eighteenth century,  
by Daniel van Voorhis*

*Modern candelabrum, by Georg Jensen*



*An American tankard, made  
in New York about 1740*



*American-made tea-  
spoon, eighteenth or  
nineteenth century*



*Modern flat silver,  
designed and ex-*



*Modern teaspoon de-  
signed and made by  
Black, Starr & Frost—  
Gorham*

*ecuted by Georg  
Jensen, New York.*





# A Pictorial Review of Modern Architecture in Europe



By F. R. YERBURY, HON. A. R. I. B. A.



*Post-Office Building, Stuttgart, Germany.  
Designed by the Official Architects of the State Post-Office Department*







*A shop front in Berlin, Germany.  
O. R. Salvisberg, architect*



*Doorway to a shoe shop in  
Berlin, Germany.  
D. Savattero, architect*







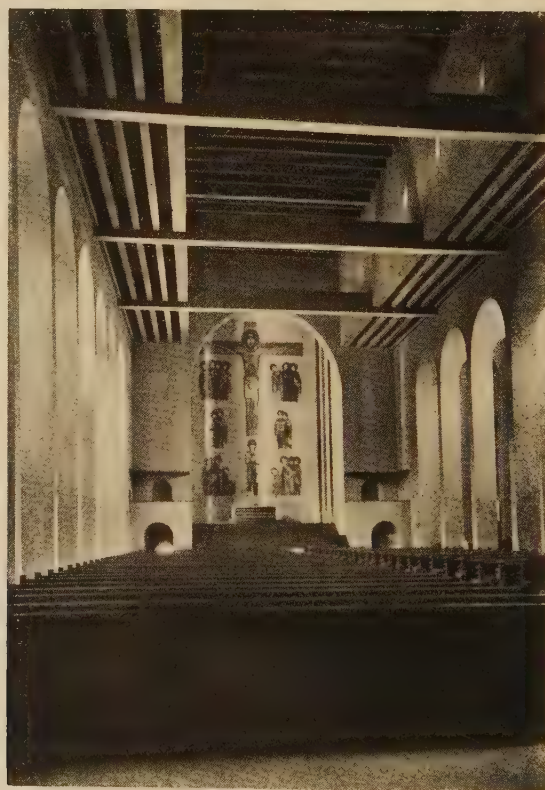
*High School, Frankfort, Germany.  
Professor Martin Elsaesser,  
architect*



*A detail of the entrance to the  
Frankfort school*







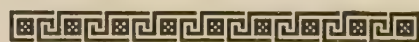
*Church of Our Lady, Frankfort, Germany. Hans Herkomer, architect*







*Church of Our Lady, Frankfort, Germany. Hans Herkomer, architect*



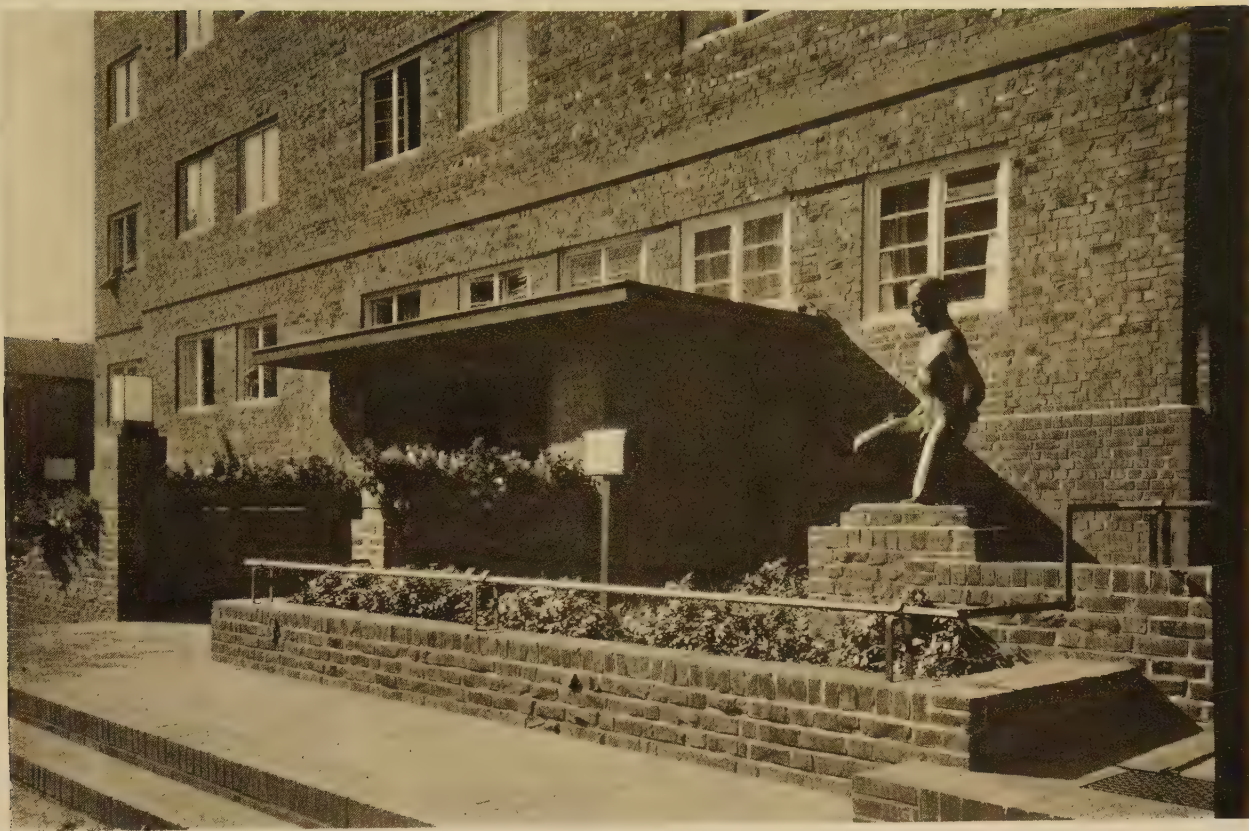




*Housing block, Hamburg, Germany.  
Paul Frank, Architect*



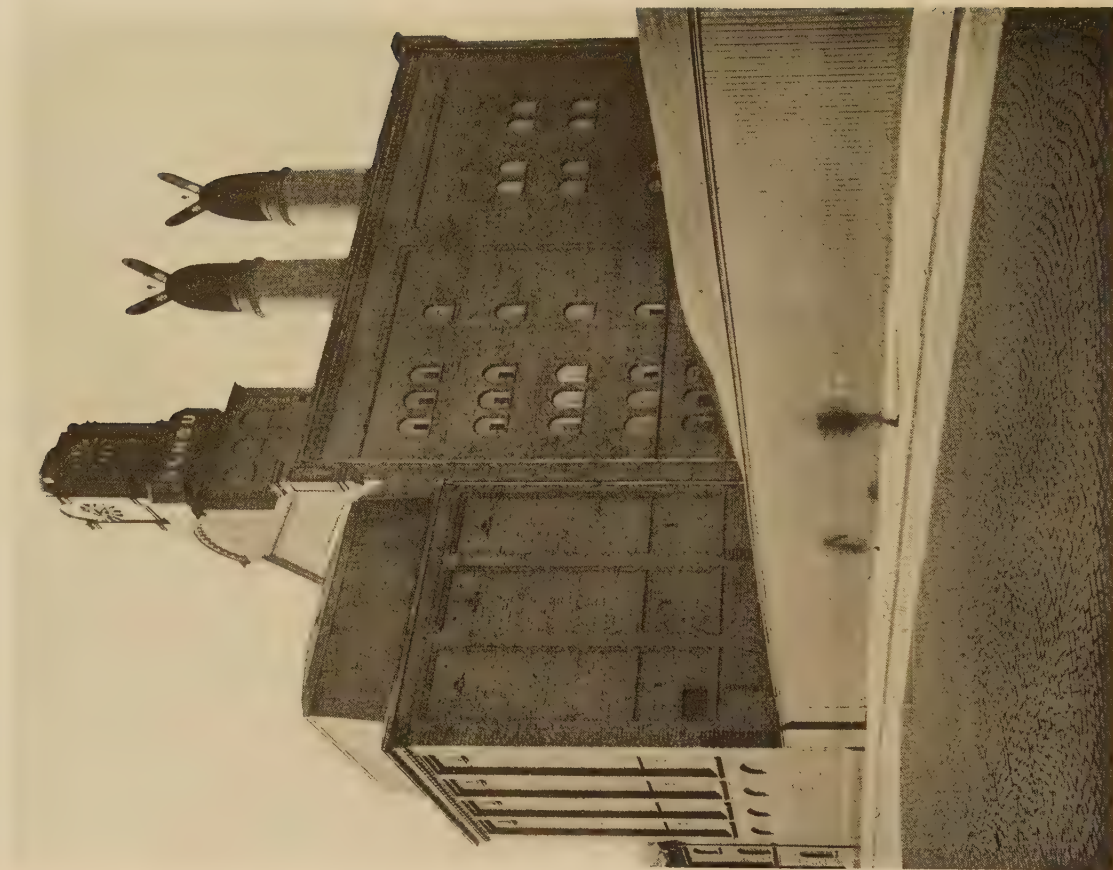
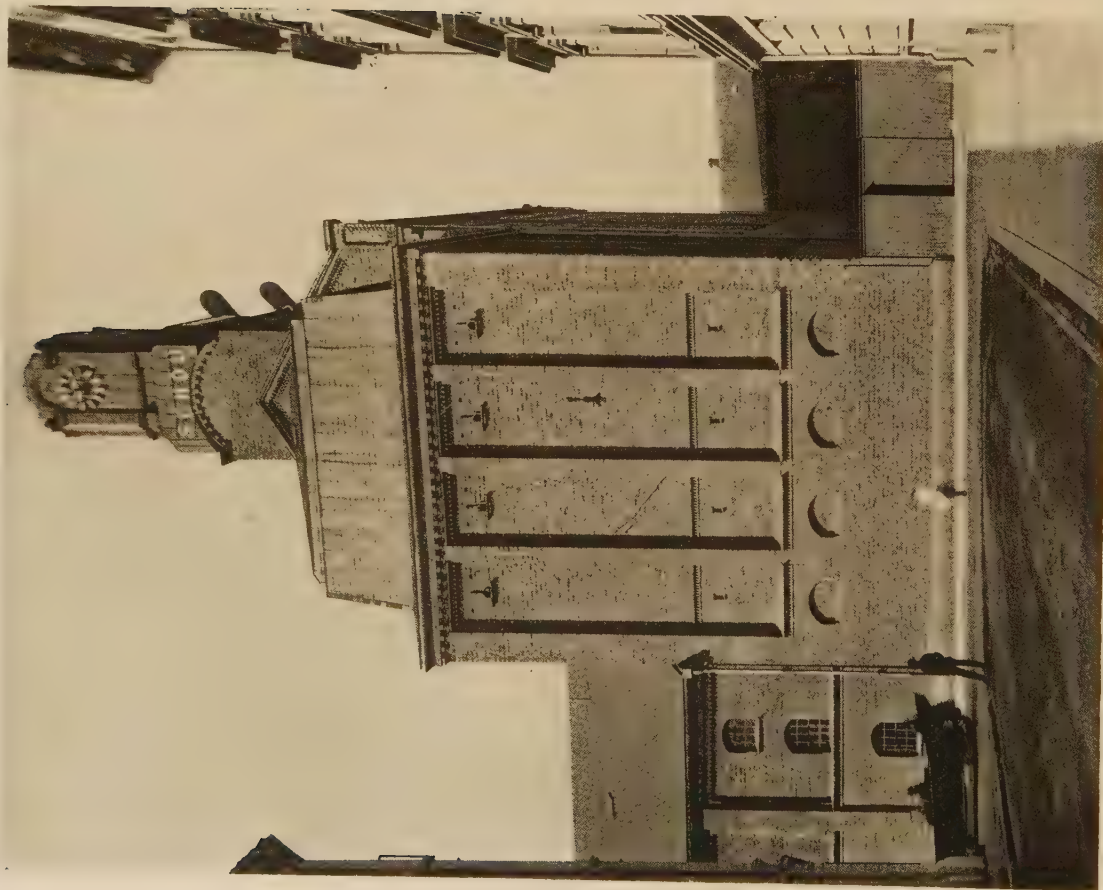




*Housing block, Hamburg, Germany. Paul Frank, architect*







*Schou Brewery Building, Oslo, Norway.  
Lars Backer, architect*



*Tuesday, February 25.*—Up to Park Avenue at 79th Street to see an apartment-house in course of construction. Sloan & Robertson have designed the building for construction in steel frame, junior beams, and an interesting system of pre-cast gypsum floors and ceilings. The slabs are 24 by 30 inches, easily handled by one man. For the ceiling, these hang at any desired height by means of steel clips. For the floor, they rest directly upon the junior beams, and their projecting reinforcement wires are locked together with a twist and hammered down. The joints are grouted with a thin mortar of the same material. The ceiling is hung first and grouted from above, then the floor slabs are put on and immediately grouted. Speed of erection is the outstanding advantage of the system, in addition to the saving of dead load, and excellent insulation of sound between stories.

*Thursday, February 27.*—Ralph Walker, lecturing before a group of architects and students at New York University, stressed the fact that architecture of to-day must do two things. It must satisfy the physical needs of man and it must also satisfy his mental needs. This is in disagreement with Raymond Hood, whose contention last week was that satisfying the physical needs is enough—though I think he believes nothing of the kind.

In the evening Lee Simonson presented at The League his long anticipated skit, "The Death of a Modernist, an Interrupted Tragedy with Song." Henry Bultitude, the hero, rhapsodized upon and contended for the traditions in decoration and furnishings. Oscar Widman, as Asterisk, the innamorata of Bultitude, presented the amusing spectacle of a modern young woman who had dwelt too long with modern furniture and had become entirely rectangular. Lee Simonson, the aspiring plumber, wrought diligently with packing-boxes, Bx cable, and a monkey-wrench, to form purely functional furniture and decorative accessories, much to the amusement of a large company.

*Friday, February 28.*—The interests that lay nearest the heart of William Rutherford Mead are indicated by the disposition of his estate, the appraisal of which is just announced as about \$750,000 net. The entire estate goes to Mrs. Mead, and upon her death will be shared by Columbia University, Amherst College, and the American Academy in Rome.

*Monday, March 3.*—Attended the opening of the Second Annual Antique Exposition, occupying two floors of the Grand Central Palace. It was as crowded as an automobile show. Apparently the more people see of modern furniture, the better they like that of their forefathers.



## The Editor's Diary

*Tuesday, March 4.*—The newspapers report at some length the formal dedication of Coolidge Dam in Arizona. There is much detail in the report as to what kind of water filled the bottle with which the dedication ceremonies were performed, what Mr. Coolidge said, what the Governor of Arizona said, the fact that the authorized expenditure for the dam was \$5,500,000, and much else. The reports go on to say that the Coolidge Dam is the first example of the multiple-dome type. To whose genius this should be credited is apparently a matter of no public interest, since the only credit mentioned is: "engineered and installed through the Interior Department by the Commissioner of Indian Service and his staff of engineers."

Inquiry reveals the fact that in 1925 the Commissioner of the Indian Service in the Department of the Interior appointed the following three engineers to prepare plans for the Coolidge Dam: Louis C. Hill, Fred A. Noetzli, and Andrew J. Wiley. The multiple-dome type design was developed in the Los Angeles office of the U. S. Indian Service and the *Engineering News-Record* gives the credit for the concept to Major Charles A. Olberg, Assistant Chief Engineer of the Indian Service.

*Wednesday, March 5.*—The architectural editors welcomed to their luncheon to-day Harold V. Walsh, professor of architectural construction at Columbia, who was in the midst of formulating a new short course for illuminating engineers. These men, having acquired the practical side of the craft, want to know something about the architect's aims and his attack of the problem. The discussion brought out the usual conflict between that point of view which would have the illuminating engineer learn what the architects desire for æsthetic effects and, on the other hand, the point of view that maintained this: lighting, with the exception of outdoor effects for advertising purposes, is a matter between the illuminating engineer and the psychologists. The question is one of how to meet the demands of the human beings who are to use the room in question, and in what way. It is not merely a question of providing sufficient wattage, but also a problem of satisfying or stimulating certain moods and emotions. On this subject the architect is perhaps little fitted to advise.

*Friday, March 7.*—Month by month, almost day by day, it is becoming evident that we are on the verge of a revolution in our domestic architecture. The building of small houses is certainly generations, if not centuries, behind those industries which supply the other basic commodities of life. In the past fifteen years alone, the productivity of a man in the automobile industry has increased 172%, while the productivity of a man in the housing industry has actually decreased, in some trades nearly 50%. Our progress in the construction of large buildings has been revolutionary; our failure to progress likewise in the construction of small houses has been a large minus quantity.

Our building of the individual house is a disorganized custom-tailoring procedure, totally at variance with almost every other activity of modern civilization.

But there are signs that we are about to wake up. Housing has been attempted with large precast concrete slabs, again with a steel frame, again with interlocking gypsum blocks held by a structure of poured concrete, again with walls of pressed excelsior made rigid with concrete studding, again in Germany with wall sections of sheet steel; Buckminster Fuller pictures a house of duralumin supported on a mast.

Unquestionably we are working toward some form of factory-made building units permitting easy transportation and quick assembly. Our kitchens are already factory-made in unit sections, our bathrooms will soon be made in the same way. This by no means indicates a standardized building or group of buildings, but rather many forms of building, varying in size and shape but built of a few standardized units. It would be well for the architectural profession not to stand in the path of this march of progress, but rather to direct its force along lines that will satisfy not only most practical needs but æsthetic needs as well.

*Sunday, March 9.*—Journeyed out to Princeton to spend the day with the Geerlingeses, and enjoyed seeing again Cram & Ferguson's Graduate School Group, their chapel, and the undergraduate dormitories. It is an interesting exercise to attempt among the latter to ascribe authorship to the various men who have designed them: Day, Klauder, Cram, Benjamin Morris. To my mind Cuyler Hall, by Day & Klauder, built in 1912, is the finest example of Tudor Gothic adaptation on the campus.

*Monday, March 10.*—Lunched with John Mead Howells, who told me of a collection he has been making over the years—photographs of fine early American architecture which has disappeared. The more familiar things, of course, are



well known through books and monographs, but Mr. Howells has succeeded in collecting several hundred photographs of interesting architectural mile-stones that are not to be found elsewhere. He uses the collection as a reference source for the drafting room. It seems as if some way should be found to publish the bulk of it and make it more widely available.

*Wednesday, March 12.*—Lunched with Herbert Lippmann, discussing the possibilities and plans for extending the activities of The Architect's Small House Service Bureau, so that supervision is an essential part of the service. The organization is looking toward this end now, and much may be accomplished through working upon the agencies which loan money upon mortgages.

*Thursday, March 13.*—Lunched with S. F. Voorhees and Aymar Embury, who were directing the full force of their respective architectural abilities upon the tremendous problem of erecting a canvas marquee to shelter their forthcoming class reunion at Princeton.

Henry Wright lectured upon city planning and its relation to the architect, in the weekly series at New York University. After some years of city planning by architects, the year 1911, with the coming of the automobile, marked the passing of control from the architects to the engineers, according to Mr. Wright, who is by no means satisfied that the change was wholly for the best. It is astonishing that we have permitted the illogical, uneconomical grid-iron theme so to dominate our city designs. There are signs in these latter days, however, as in Radburn, N. J., and elsewhere, that we are beginning to recognize motor transportation as a factor necessarily separable from pedestrian traffic. We are also awaking, though tardily, to the fact that the bringing together of a lot of independent back yards and side yards and alleyways can be made to give our communities a spaciousness hitherto thought impossible. Here again is the giving way of an outworn feudal individualism before the obvious benefits of co-operative planning. Robert Millikan says that there have been three outstanding discoveries in the history of civilization—the Golden Rule, natural law, and evolution. We are beginning to rediscover the first of these in our community planning.

*Friday, March 14.*—It is a curious thing that many people think of a city like New York as a place in which it is necessary to spend a few of one's waking hours in the grind of business, after which it is a good place to leave behind. Yet no other spot in which men come together presents so many fascinating opportunities for enjoyment in a wide diversity of ways. Yesterday, for example: Left the office at five, listened

for an hour to Henry Wright's informative lecture, walked up Fifth Avenue to dine with my favorite client (name withheld in the interests of keeping him), walked down to The League to watch Ed Trumbull and Francis Keally display a new rendering technic with large blocks of "lecturer's chalks" in many colors, strolled down to Washington Square to dress and, at midnight, back to The Players Club to meet Mr. Mei Lan-Fang, the eminent Chinese actor, who has just brought to America an art developed from hundreds of years before the Christian era—an art so consummate and so filled with the symbolism of subtle motion as to be almost beyond Western comprehension. Walter Hampden, Edwin Milton Royle, and a large company of actors, singers, painters, and representatives of other arts had gathered to do him honor. And so home and to bed, as Samuel Pepys would put it, calling it a day.

*Saturday, March 15.*—Sullivan Jones, formerly State Architect of New York, is quite wrought up over our architectural registration law. At present it is mandatory that an applicant shall have completed two years' training in an approved college or technical school. Subsequent to January 1, 1937, this requirement is to be increased to the full course of four or, in some schools, five years. Mr. Jones argues that we are, or should be, less concerned with the details of how or where the applicant got his training than with his actual capabilities to practise architecture. He feels that the present law will eventually restrict the profession to those born with silver spoons in their mouths. Not necessarily, since through increasing endowments it is becoming more easily possible, year by year, for a man to put himself through college by his own efforts. Probably it will not be long before a college training is as readily available to those who want it as a high school training now is. Nevertheless, it does seem as if the result were the main thing rather than the procedure by which it was secured. A certain amount of discretionary power should be granted the examining board, provided only that the personnel of the latter is of a character above suspicion. Incidentally, it is interesting to cast one's eye about the higher reaches of the profession in this generation, noting the many men who have attained their eminence without benefit of college training, such as Charles F. McKim, William R. Mead, Stanford White, John M. Carrère, Ralph Adams Cram, Bertram G. Goodhue, H. Van B. Magonigle, Egerton Swartwout, Charles Z. Klauder—to mention just a few that come to mind.

*Monday, March 17.*—Mrs. Asplund, Librarian of the Archæological Institute of America, at Santa Fé, writes me that

the captions under some of the March illustrations are in error. In the group of photographs showing "Architectural Details of Our Own Southwest," the word "Chenango" should read Chimayo, which is the name of the community where Sanctuario is located. San Ildefonso is not a Hopi pueblo but is an Indian village on the Rio Grande a few miles to the northwest of Santa Fé.

Our batting average on captions in the March issue is further reduced through our crediting the entrance to the Medical Arts Building, Brooklyn, page 188, to Mr. Andrew J. Thomas; Mr. Mortimer E. Freehof was the architect.

*Tuesday, March 18.*—The Royal Architectural Institute of Canada is somewhat concerned with the competitive professional threat of their neighbors to the south. The question is how are you going to equalize the tax which the Canadian practitioner pays, and that which the American architect should pay upon earnings in Canada. As matters stand now there is a customs charge upon plans entering Canada from the United States—2% of the cost of the building. In some cases, outside architects and engineers have their plans prepared in Canada, thus avoiding the customs entirely, but satisfying the protective aim of the Canadian duty. It is now proposed, however, to increase the rate on plans to 3% of the cost of the building, which is a rather high protective barrier.

*Thursday, March 20.*—Robert D. Kohn talked of Industrial and Business Buildings in this week's lecture of the New York University course for architects and students. He traced the development of this type of building from the dwelling house, through Robert Atkinson's improvement in slow-burning mill construction, through the gradual displacement of bearing walls by piers, to the mushroom type in reinforced concrete, and the steel frame. One curious fact is that in our attempts to get more glass space in the walls, we finally hit upon setting the columns of the mushroom type back one-half a bay, cantilevering the floors to the building line, thus doing away with the need for any vertical supporting members in the wall itself. Our factories then presented merely a series of unbroken window surfaces on the outside wall. European modernists seized upon the idea and exploited it, and now we are copying these horizontal expanses of glass and thin mullions from them, apparently having forgotten that we invented the scheme ourselves.

The acceptance of the elevator has driven out the staircase as a monumental feature and relegated it to the class of a purely utilitarian fire-escape. The elevator itself has moved back from the



# *Lest We Forget:*

*The architectural press devotes much of its space to current work, a little to that which is very old. In between the two fields lies a forgotten wealth of achievement, to which we might glance now and then to verify our course of progress.*



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*The New York Herald Building, built in 1894 from the design by McKim, Mead & White, architects. This one-time landmark of Herald Square, New York, was demolished several years ago to make way for a tall building*





front entrance to less desirable space; in the case of department-stores it is located so as to make the customer walk as far as possible through displayed merchandise. After our steady march toward greater and still greater window area, it now seems possible that we may soon design buildings without any windows whatever—as we already do in the case of theatres.

In this matter of artificial lighting and ventilating, it was interesting to learn that apparatus for air conditioning and cooling may in some instances cost as much or more than the building itself, even though, as in Macy's department-store, it has been found that a drop of five or six degrees below outside summer heat is all that people will adapt themselves to, hygienically and with comfort.

At The League to-night we had the pleasure of seeing motion-pictures telling the story of copper-mining and brass-making, with a talk on the use of metals in present-day architectural design. From the questions asked afterward, it became evident that the architects are hungry for accurate information as to the new alloys of nickel, copper, and steel, particularly as to their strength in both tension and compression, their action in expansion and contraction, and their resistance to corrosion. One thing we shall have to learn, however, and teach our clients—the necessity for keeping polished surfaces of metal clean as a matter of regular maintenance, just as we recognize the necessity for washing windows.

*Friday, March 21.*—To Miss Malvina Hoffman's studio for tea and to hear

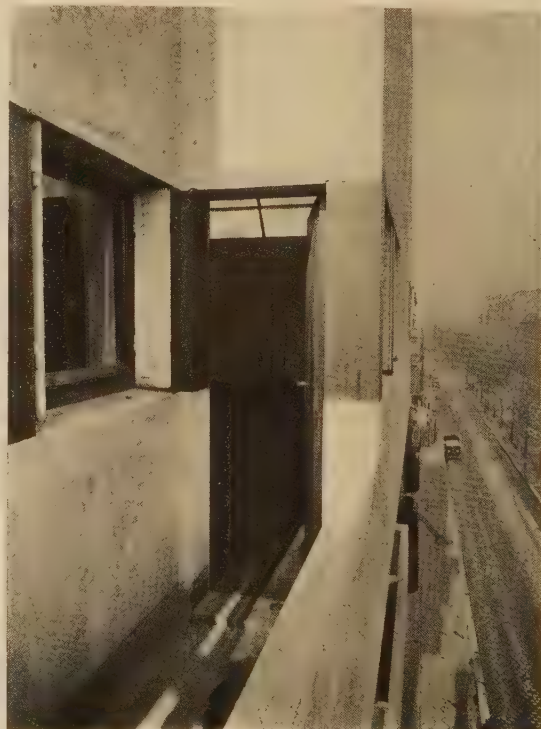
about Lieutenant Jean-Julien Lemordant. Here is a brilliant Breton painter who went to war in August, 1914, rose from private to lieutenant, was wounded several times, and was finally blinded by a bullet through the head. Five days later he was picked up on the battle-field by the Germans. After one of many operations on his head he was left dumb, and paralyzed on his left side. With nearly two years of self-discipline, teaching, and by almost superhuman patience and courage, he regained his power of speech and the use of his left leg. Hearing and the sense of touch in his right hand were the sole gateways left to his mind. He began modelling, and with this medium instead of drawings he has now designed for himself a studio apartment with all of its furniture on the Avenue du Parc de Montsouris, Paris. Some photographs of this are reproduced herewith. It is interesting to observe that when Lieutenant Lemordant lost his sight there was no such thing as modern architecture as we know it to-day, yet that is what he has produced. His instructions to the workmen regarding color were made possible by his extraordinary memory of his own painting. His desire for a certain blue is conveyed to the painters by referring them to the sky tone in one of his Breton landscapes, the hue of a floor following the color of a fisherman's waistcoat. Yale University awarded him the Howland Memorial Prize for "an achievement of marked distinction in literature, the fine arts or the science of government." Lieutenant Lemordant came to America in 1918 to receive the Yale medal and to make an address of acknowledgment.

*Monday, March 24.*—An anonymous writer in *Antioch Notes* presents what seems to me a good picture of the situation with regard to Eastern art. "I believe that the best of Japanese painting, in its fine restraint and sensitiveness, is far superior to the art of Europe. Yet it is passing. G. Lowes Dickinson wrote several years ago that the old Japan everywhere seemed imbued with a spirit of beauty. He ventured the opinion that Japanese sensitive to beauty no longer lived; for in the modern industrial development of Japan, vulgarity and ugliness were universal. My interpretation differs from his. Probably the mass of the population had never possessed great æsthetic discrimination, but great masters had lived, and gradually the authority of greatness had become recognized and accepted. With the industrial revolution, 'self-expression' on the part of indiscriminating masses led them to cast aside the great æsthetic tradition, almost unaware of any loss. Gilbert Murray says of the *Annual of Japanese Art* for 1927: 'In it there are two main schools represented, one of which follows the native tradition and one of which has fallen under the influence of Europe. . . . I feel confident that if the two styles of art found in that book had been found by excavation on some ancient site, every critic would have said: "At this point it is clear that the old and fine civilization of Japan was overrun and almost destroyed by a peculiarly low type of barbarian. It is just what we find in the Minoan Empire, or in the collapse of Roman Africa under the attacks of the negroes."'" Meanwhile, the "low barbarians" move on.



*Lieutenant Lemordant's apartment studio, on a triangular piece of ground hitherto thought impracticable for a building. It is on the left bank, Avenue du Parc de Montsouris, Paris. There is a garage on the ground floor*

*The building laws of Paris permit no more projection than one metre for an overhanging feature—thus making possible the balcony from which Lieutenant Lemordant's visitors have a splendid view of Paris over the tree tops*







# ARCHITECTURE'S PORTFOLIO OF ELEVATOR DOORS



BLISS &  
FAIRWEATHER



WALKER  
& EISEN

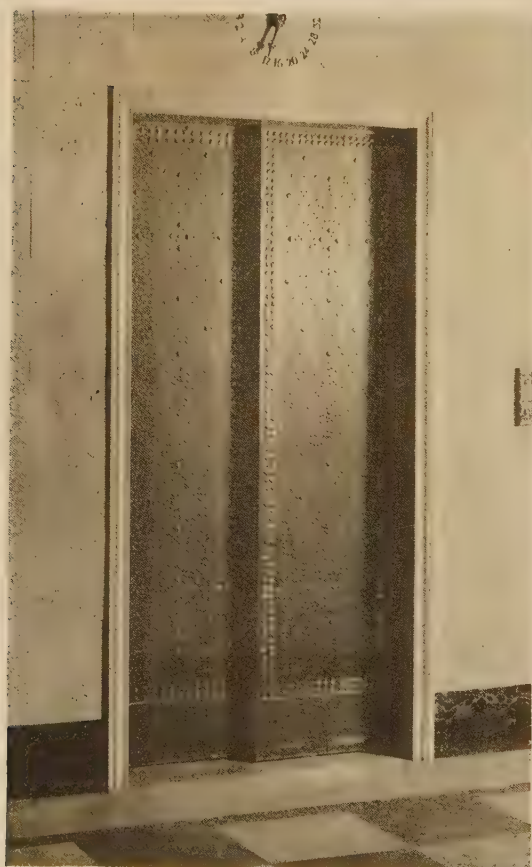


JOHN MEAD  
HOWELLS;  
RAYMOND M.  
HOOD, ASSOC.





BAKEWELL  
& BROWN



ARTHUR  
LOOMIS HARMON



THE FIRM OF ELY JACQUES KAHN





CASS  
GILBERT



THE FIRM OF ELY JACQUES KAHN



KROKYN &  
BROWNE





CASS  
GILBERT

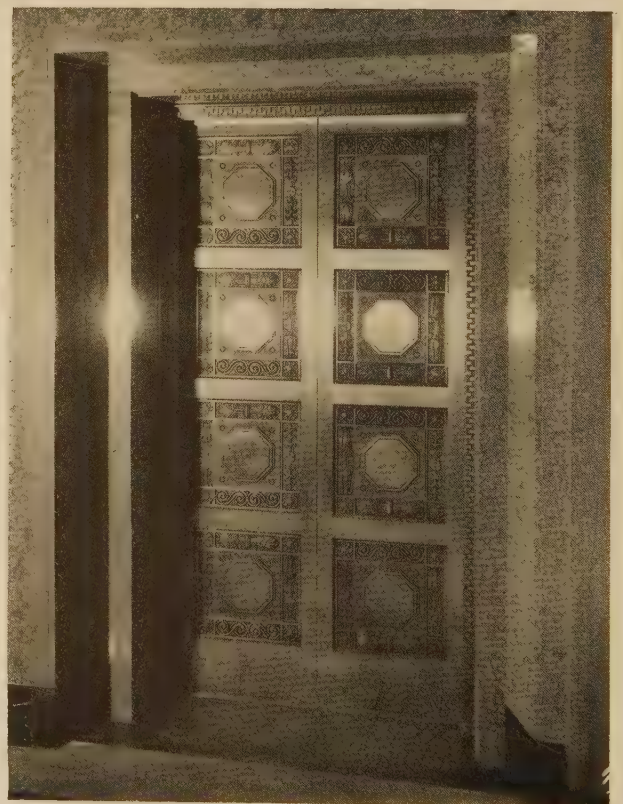


JARVIS HUNT



GRAHAM, ANDERSON,  
PROBST & WHITE

JOHN A. AUSTIN  
JOHN & DONALD PARKINSON  
A. E. MARTIN







MARCELLUS  
E. WRIGHT



PRINGLE  
& SMITH

SMITH, HINCHMAN  
& GRYLLS



GEORGE S.  
RIDER CO.







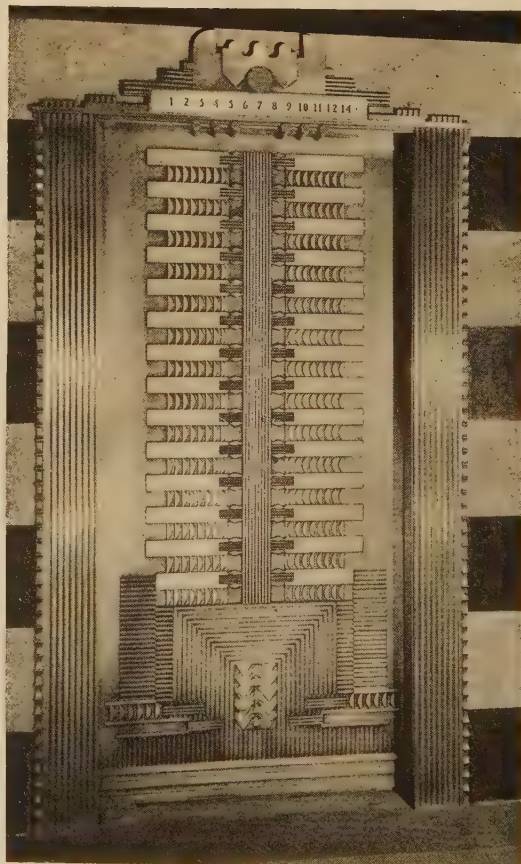
YORK &  
SAWYER



CROSS &  
CROSS



THE FIRM  
OF  
ELY JACQUES  
KAHN







SMITH,  
HINCHMAN  
& GRYLLS



CASS  
GILBERT



THE FIRM  
OF  
ELY JACQUES  
KAHN







VOORHEES, GMELIN  
& WALKER



JOHN MEAD HOWELLS AND  
RAYMOND M. HOOD

HOLABIRD  
& ROOT



VOORHEES, GMELIN & WALKER



CASS GILBERT



SCHULTZE & WEAVER





# CONTACTS

DEVOTED TO A BETTER UNDERSTANDING OF THE BUSINESS SIDE  
OF ARCHITECTURE AND ITS RELATION TO THE INDUSTRIES



## Standardizing the Specifications for Stucco

*By Wal-Ward Harding, A. I. A.*

THE development of Portland cement and its subsequent use as a cementing agent in stucco is undoubtedly one of the principal reasons for the present-day popularity of stucco. Portland cement simplifies preparation and application to such an extent that stucco is easily within the means of any client. In some respects, the popularity of stucco in modern times was established too quickly; that is, the great demand which developed resulted in a number of inferior products being thrust upon the market.

Foreseeing that the prestige and value of stucco as a building material would be lost unless a definite standard of quality was established, the American Concrete Institute recently prepared a specification setting forth the minimum requirements of true Portland cement stucco. Extensive tests were made in both field and laboratory to determine just what the standard should be before the specification was prepared.

### GENERAL

1. The purpose of these specifications is to establish minimum requirements for finish coat Portland cement stucco.

2. The term "finish coat Portland cement stucco" shall be understood to mean a Portland cement mortar used to cover or decorate preceding coats of Portland cement stucco, or other suitable bases on exterior walls and surfaces exposed to the elements.

### Strength Requirements

3. The minimum average compressive strength of finish coat Portland cement stucco at 28 days of age shall be 2,000 lbs. per sq. in. when molded and tested as 2-in. cubes in the manner hereinafter specified.

### Absorption Requirements

4. Finish coat Portland cement stucco shall not absorb more than

10 per cent of water when tested as hereinafter specified.

### Other Requirements

5. Finish coat Portland cement stucco shall not contain more than 35 per cent by weight of the whole sample of material passing the 100-mesh sieve.

6. If pigments are used, they shall be pure mineral oxides, guaranteed by the manufacturer to be of uniform quality and proof against action of lime and sun.

### METHOD OF MAKING SPECIMENS

7. Finish coat stucco to be used in making specimens for all tests shall be mixed to plastering consistency. The approximate amount of water required to mix any stucco to plastering consistency shall be indicated by the manufacturer of that stucco.

8. In making specimens, molds shall be filled in two layers, each layer being lightly puddled with the finger. Stucco shall be left heaped on molds and be struck off at the end of 3 to 4 hours. Immediately after molding, specimens shall be covered with moist burlap for 24 hours, then removed from the molds.

9. After removal from molds specimens shall be immersed in water for 6 days, and thereafter stored 21 days in dry air of the laboratory at approximately 70 degrees F. Specimens shall be tested at age of 28 days.

### METHOD OF TESTING

10. Not less than 3 and preferably 5 specimens shall be required for each test. In the event of failure of the first set of specimens, the test shall be repeated on a second set of specimens.

11. Absorption tests shall be made on 2-in. cubes. After being cured, as provided in paragraph 9, they shall be carefully weighed and then completely submerged in water

at a temperature of between 60 and 80 degrees F. for 24 hours. Specimens shall then be removed, the surface water wiped off with a damp cloth and the specimens quickly weighed. The percentage of absorption is the difference in weight divided by the dry weight of the specimen and multiplied by 100.

12. Specimens for compression test shall be tested in a vertical testing machine of not exceeding 50,000-lb. capacity. Load shall be applied through a spherical bearing block placed on top of the specimen. The dimensions of the bearing block shall be the same or slightly greater than those of the specimen.

13. Load shall be applied uniformly and without shock. The speed of the moving head of the testing machine shall be not more than 0.05 in. per minute when the machine is running idle.

14. Specimens shall be loaded to failure and unit compressive strength calculated in pounds per square inch. The type of failure and appearance of the specimen shall be noted.

Many of the manufacturers of true Portland cement stucco to-day comply with this specification. Approved testing laboratories in various parts of the country are being retained by producers. Copies of the laboratory reports frequently are made available by the manufacturer and furnished with his product.

Throughout its history, stucco has been considered as one of the aristocrats of building materials. In olden times, a great deal of time, labor and skill were required to produce satisfactory results. To-day, however, it is only necessary to insist that Portland cement stucco shall meet the American Concrete Institute specification to be sure of a product that will give results—both æsthetic and structural—far in excess of those of yesteryear.



MANY of our larger cities are strangely silent on Sunday morning. For some years it seemed that bells had lost their popularity. Where bells existed they were generally poor in quality, unmusical in tone, and rung by people who did not understand the principles of correct ringing.

This state of affairs is changing. With a renewal of interest in church building, more attention is being paid to the subject of bells, for, as some one has said, a church without a bell is almost like a man without a voice.

While it is true that we cannot hope to match the craftsmanship of the Middle Ages in many respects, yet this is not true of bells. There are bell founders to-day who can make bells that are as good or better than anything that was done in the past, and who can tune bells much more accurately than ever before. Moreover, bells are comparatively inexpensive, and there is no reason why a church need go without one or more bells.

Many bells are very poor in quality and in tone. There is no excuse for this, since a bell of excellent quality costs very little more than a poor one. It is largely a question of knowing where to go to get the best results.

In America many bells are composed of 80 per cent copper and 20 per cent tin. This is fairly good, but a better proportion is the old idea of 13 to 4, that is, thirteen parts of copper to four of tin. A larger proportion of copper softens the metal and results in a poor tone quality. A larger proportion of tin gives the bell a more brilliant quality, but causes it to be more brittle, and increases the danger of cracking. The old custom of collecting old silver trinkets and casting them into the melting pot is a pleasing bit of sentiment, but silver in the alloy will not produce the poet's "silvery" tone, but is more apt to injure it.

While it is possible for almost any bell founder to use the proper proportions of metal, yet a bell must not only contain the correct proportions of tin and copper, but it must be correctly and carefully tuned. Bells in olden days were tuned by hand. In order to flatten the pitch, metal was chipped off the inside of the lip of the bell. To sharpen it, metal was chipped and filed off the

# Church Bells

By F. R. Webber

(Abridged from an article  
in *Lutheran Church Art.*)

outside. While some surprisingly good results were obtained by the old-time bell founders, yet the results are not as good as those obtained by the best bell founders to-day, who use the vertical lathe. By means of this lathe, metal may be skimmed off very accurately.

The reader may be aware of the fact that when a good bell is rung, at least five notes may be distinguished. There is the principal note given out when the bell is tapped. This is called the strike note. Then one can hear more faintly the octave below, called the hum note. If one listens carefully he will hear the minor third, the fifth, and the octave above. In the case of a poor bell, these five tones are blurred and indistinct, but if the bell is properly made and carefully tuned, these five notes are easily distinguished. In some of the best bells seven such harmonics may be distinguished, and even more in some cases.

The old system of tuning is that in which the strike note, the third, the fifth, the octave, and the hum note are brought into perfect accord. Nowadays some of the best bell founders use the Simpson system, tuning the strike note, the minor third, the perfect fifth, the octave above, and the octave below.

Very few bell founders have the skill and the musical ability to do this accurately, and that is why the vast majority of our older bells are unpleasant to the sensitive ear, and deficient in that clear, pure, carrying tone that is associated with the finer bells.

Even though one may have a good bell, an improper mounting and an ignoring of the principles of correct ringing will impair its tone. Very few of our American bells are properly hung. Most of them lack the stay and the slider. These are devices which permit a bell to be swung until the mouth is upward, and yet not turn completely over.

If a bell is rung mouth downward, as is generally the case in America, it produces a melancholy tone. If it is struck with a tolling hammer, the tone is dull and mournful. If it

is rung by means of levers and mechanical hammers, as is the case with chimes and carillons, there is a loss of brilliancy and carrying power. It is only when a bell is "set" mouth upward, and then pulled by a skilled ringer until it is once more mouth upward, that a clear, joyous tone may be produced. Without stays and sliders this effect is almost out of the question.

The glories of the carillon have been sung so often lately that we will not add anything to the discussion. A word of warning might be in order. Lately there is a tendency to call every set of ten or more bells a carillon. This is not true. A carillon is a set of bells chromatically tuned, and including two or more complete chromatic octaves. If there are less than 25 bells, it cannot properly be called a carillon. In fact, the majority of carillons are composed of from 35 to 50 or more bells. Mountain Lake, Florida, has 71 bells.

The carillon is so immensely popular in America lately that we hesitate to call attention to an older form of bell ringing that is well worthy of revival in this country. We refer to the good old custom of ringing changes. No one who has not heard the superb effects in old-world towns can realize the thrill that is experienced upon hearing a guild of good ringers giving an exhibition of their skill. To ring changes, there must be from five to twelve bells. With five bells 120 changes may be rung. With six bells 720 changes are possible. With eight bells no less than 40,320 changes may be rung, while a peal of twelve bells will make it possible to sound the incredible number of 479,001,600 changes.

Any number of changes less than 5,000 is called a "touch," or a "quarter peal" or a "half peal" as the case may be. Any changes over 5,000 is known as a "full peal."

In lands where change ringing is a popular pastime, a guild of men is formed, and they are taught to ring the bells in regular sequence, putting them through an elaborate series of tone patterns known by such names as Grandsire Triples, Stedman Triples, Bob Minor, Kent Treble Bob Major, etc. Six bells are known as minors, seven as triples, eight as majors, nine as caters, ten as royals, eleven as cinques, twelve as maxims, etc.









ORVIETO

*From the drawing (13 x 16 inches) in sanguine  
by ERNEST BORN*

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